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ABSTRACT

The 1972 WEST conference report represents a cooperative project of the Western Educational Society for Telecommunications and the ERIC Clearinghouse on Media and Technology. The conference featured discussions of public television, instructional television, cable television, national educational radio, and national public radio, educational broadcasting, and communication satellites. Six speeches are presented in full: the keynote address by James Day; a discussion of the Telecommunications Center by the president of the National Association of Educational Broadcasters (NAEB); a review of the state-of-the-art of cable television; a look at the Public Broadcasting Service (PBS) through the eyes of its president and of the general counsel for the President's Office of Telecommunications Policy; and a brief discussion of some of the plans of the University of California for the use of television, auto-tutorial instruction, dial access systems, and computer-aided instruction in part time degree programs.  
(JY)

ED 064951

# REPORT OF THE SECOND ANNUAL CONFERENCE

FEBRUARY 28 -  
MARCH 2, 1972

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ERIC  
Full Text Provided by ERIC

WEST  
WEST

ESTERN EDUCATIONAL SOCIETY for TELECOMMUNICATIONS

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## FOREWORD

The 1972 WEST Conference Report is a cooperative project of the Western Educational Society for Telecommunications and the ERIC Clearinghouse on Media and Technology. Both organizations believe the significance and relevance of information presented during this year's conference merits distribution beyond the WEST membership. The dissemination of this report to the telecommunications community at large is being made possible through the assistance and support of ERIC.

Several of the General Session speeches were audio-tape recorded and subsequently transcribed as faithfully as possible. Some editing of the speeches was necessary.

The Concurrent sessions were reported by conference participants. Therefore, opinions expressed are those of the recorder and not of the conference. Also, omissions in reporting certain concurrent sessions is due to the fact that the report for that session was never received.

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San Jose State College**

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**JUNE 1972**



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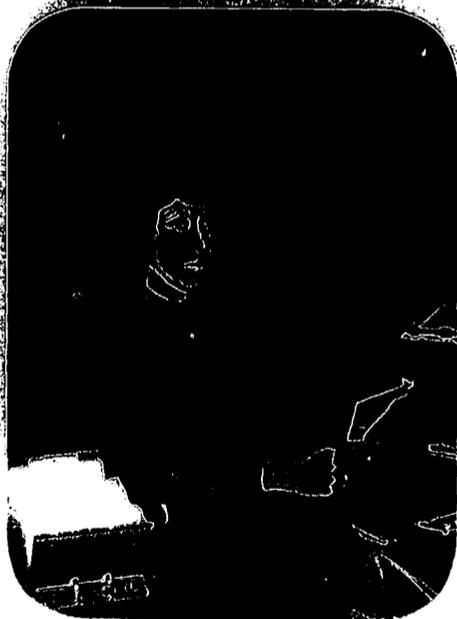
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# STAFF

# AT

# WORK



**1972 CONFERENCE COMMITTEE**

**GENERAL CHAIRMAN  
Ray McKelvey**

**PROGRAM CHAIRMAN  
Gordon Hughan**

**MASTER OF CEREMONIES  
Chuck Vento**

**STUDENT SESSIONS  
Don Kirkorian**

**RADIO SESSIONS  
Wendell Dodds**

**PRODUCTION SESSIONS  
Tom Meador**

**BEST OF WEST AWARD  
Louis Nevins  
Daniel Odum**

**CONFERENCE HEADQUARTERS  
Ann Murdoch  
Evelyn Cobb**

**-- ACKNOWLEDGEMENTS --**

**WEST acknowledges with gratitude the following:**

**The San Francisco Visitors and Convention Bureau for operation of the registration desk, providing badges, and program covers.**

**Pacific Telephone Company for arranging and operating the conference message center.**

**The NAEB for help with planning and arrangements and for sponsoring and operating the job information center.**

**The Santa Clara County Department of Education and KTEH-TV for personnel, services, and equipment.**

**National Instructional Television Center and NIT Western Office for support, personnel, and services.**

**Telemation California, Inc., for loan of video equipment.**

The Wine Growers of California for the wine tasting.

The SMMXENS, Fremont High School, and Mr. Russell Cummings for musical entertainment during the Awards Breakfast.

Corporation for Public Broadcasting, Public Broadcasting Service, National Public Radio, and National Educational Radio for their support and participation in the conference.

The general session speakers and the concurrent session participants whose contributions have made the conference meaningful.

Richard Elliott, San Jose State College, for preparing the conference report.

Robert Reynolds, San Jose State College, for being conference photographer.

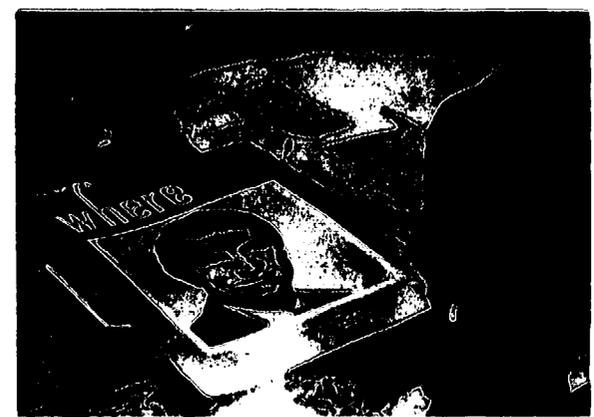
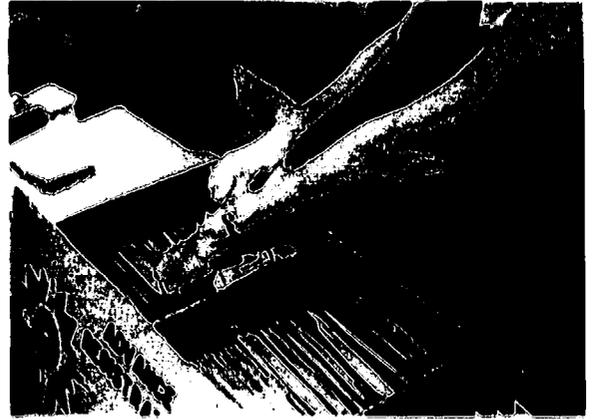
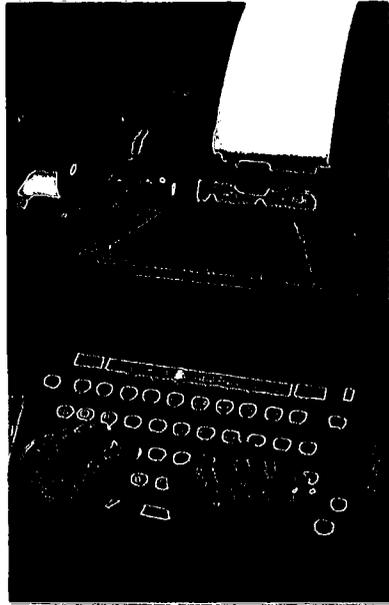
Tobe Snow, KTEH-TV, for designing the conference logo.

Leo Bleier, KTEH-TV, for press relations.

Evelyn Cobb, KTEH-TV, for editing and typing the conference promotion, correspondence, and official program.

A special acknowledgement is made to James Fellows, Director of Professional Services, NAEB, for his counsel and support of the conference committee.

# REGISTRATION



CONFERENCE PROGRAM

1972

MONDAY, FEBRUARY 28, 1972

1:00- 7:00 p.m.	REGISTRATION	South Lobby
2:00- 3:00 p.m.	SESSION RECORDERS MEETING	Regency Room
4:00- 5:00 p.m.	CONFERENCE STAFF MEETING	Regency Room
7:00- 8:30 p.m.	GENERAL SESSION #1	Ralston Room
	Welcome and Opening Ceremonies	
	Dr. Gary Hess, President, WEST	
	Keynote Address	
	Mr. James Day, President, EBC	
8:30- 9:30 p.m.	NO-HOST RECEPTION	Ralston Room

TUESDAY, FEBRUARY 29, 1972

8:30- 4:30 p.m.	REGISTRATION	South Lobby
8:00- 9:00 a.m.	CALIFORNIA PTA COFFEE HOSPITALITY	Parlor E
8:30- 5:00 p.m.	NAEB-WEST JOB CENTER	Parlor G
9:00- 6:00 p.m.	EXHIBITS OPEN	Rose Room
9:00-10:00 a.m.	GENERAL SESSION #2	Concert Room
	"Telecommunication Centers - Tomorrow's Role"	
	Speaker: Mr. William G. Harley, President, NAEB	
10:00- 4:30 p.m.	CHILDREN'S TV WORKSHOP WALK-IN CENTER OPEN	State Suite 242

10:00-10:30 a.m.	COFFEE BREAK IN EXHIBIT AREA	Rose Room
10:30-11:30 a.m.	GENERAL SESSION #3	Concert Room
	"Reaching Out With Cable"	
	Speaker: Mr. Geoffrey Nathanson, President, Optical Systems, Inc.	
11:30- 1:00 p.m.	VISIT EXHIBITS & LUNCH	
1:00- 2:00 p.m.	CONCURRENT SESSIONS & EXHIBITS	
A.	"Cable/School Cooperation: It Really Works!"	California Room
	Chairman: William G. Richmond, San Carlos School District	
	Speakers: Rita Hagemeyer, San Carlos School District Andy Trentacosta, Peninsula Cable TV	
B.	"Providing Accountability in Instructional Programming"	Forty-Niner Room
	Chairman: Robert Morrill, San Mateo County Schools	
	Speaker: Warren L. Wade, Manager, KTEH Channel 54, San Jose, Calif.	
C.	"War of the Worlds: Rock or Bach"	Golden Gate Room
	Chairman: Ken Kramer, KPBS-TV-FM, San Diego, Calif.	
	Speakers: Jerry Zullo, Operations Manager, KPBS-FM, San Diego Bob Mundt, Program Director, KOAC-KOAP-FM, Corvallis, Oregon Elizabeth Young, National Public Radio, Washington, D. C.	
D.	"Broadcasting on the European Continent: Personal Observation	French Parlor
	Chairman: Donald Wylie, San Diego State College	
	Speakers: James R. Spencer, Graduate Student, San Diego State College Larry B. Tuch, Graduate Student, University of California, Los Angeles	
E.	"What's New in ITFS"	Regency Room
	Chairman: Dr. Frank B. George, Long Beach Unified Schools	
	Speaker: Dr. Allan Fink	

F. "Radio/Television Programming  
For Minorities in Alaska" Royal Suite 262

Chairman: Robert D. Arnold, Alaska  
Educational Broadcast Commission

Speakers: Sue Pittman, Coordinator ASTI  
Satellite Radio Project  
Joe Princiotta, Consultant, Bethel Broadcast

G. "Domains of Communication in Program  
Development" English Room

Chairman: Paul Marshall, KPBS-TV-FM,  
San Diego, Calif.

Speaker: Erwin E. Gordon, Education  
Consultant

H. "Broadcast Facilities Funding" Parlor E

Chairman: Raymond J. Stanley, Chief  
Educational Broadcast Facilities Program  
HEW, Washington, D. C.

2:00- 2:15 p.m. BREAK

2:15- 3:15 p.m. CONCURRENT SESSIONS & EXHIBITS

A. "Cable: A Community Information Center"  
California Room

Chairman: John Cardenas, Production  
Manager, Cablevision, Channel 6, Santa  
Rosa, Calif.

Speaker: Ethel Greenfield Booth, Researcher,  
NCTA Project

B. "Minicourses, Television, Video Feedback:  
A New Approach to Teacher Training" English Room

Chairman: Barbara Dunning, Far West  
Laboratory

C. "National Center for Experiments  
in Television" Golden Gate Room

Chairman: Mark Hathaway, KBYU-TV,  
Provo, Utah

Speakers: Paul Kaufman and Staff,  
National Center for Experiments in TV,  
San Francisco

D. "Can Radio Have a Sesame Street?" Royal Suite 262

Chairman: Frank B. George, Longg  
Beach Unified Schools

Speakers: Educational radio management  
personnel

- E. "The Incredible Time Machine" Forty-Niner Room  
 Chairman: Walt Robson, Jr.,  
 Hewlett Packard, Palo Alto, Calif.
- F. "Does Big Brother Smile On You?" Parlor E  
 Chairman: Ney R. Landry, FCC,  
 San Francisco
- G. "Resources for an Interdisciplinary  
 Medical Curriculum" Regency Room  
 Chairman: Theodore C. West,  
 University of California, School of  
 Medicine, Davis, California  
 Speaker: Richard F. Walters, University  
 of California, School of Medicine, Davis
- H. "Western Educational Network" Parlor D  
 Chairman: Walter J. Schaar, KSPS-TV,  
 Spokane, Washington
- 3:15- 3:30 p.m. BREAK
- 3:30- 4:30 p.m. CONCURRENT SESSIONS & EXHIBITS
- A. "Sesame Street' and 'The Electric Company'  
 Utilization Techniques" French Parlor  
 Chairman: Vivian T. Riley, Utilization  
 coordinator, Children's Television  
 Workshop, New York, NY
- B. "National Educational Radio - Try it,  
 You'll Like it!" Regency Room  
 Chairman: Patricia L. Swenson, KBPS-FM  
 Portland, Oregon  
 Speakers: Bert Harrison, KWSU, Pullman,  
 Washington; Gerald Yokom, NER
- C. "Do it Yourself Audience Research" Forty Niner Room  
 Chairman: Warren L. Wade, KTEH-TV,  
 San Jose, Calif.
- D. "Minority Affairs: Philosophy, Program-  
 ming Research, and Production" Royal Suite 262  
 Chairman: Wes Marshall, KUAT-TV,  
 University of Arizona  
 Speakers: Lionel Monagas, NAEB, Director  
 of Minority Affairs, Washington, D. C.;  
 Tony Gomez, Research Specialist, KPBS-TV,  
 San Diego; Bruce Baird, Indian Telecommu-  
 nications Project, Vermillion, South Dakota;  
 E. B. Eiselein, Social Anthropologist, University  
 of Arizona

- E. "The Eric System: Information Resources" Golden Gate Room  
 Chairman: Donald Coombs, ERIC, Stanford, California  
 Speakers: Judith Yarborough, ERIC  
 Jaclyn Caselli, ERIC
- F. "Cable: School Relations" California Room  
 Chairman: Gene Hamblton  
 Speakers: Dick Rector; Doug Montgomery
- G. "Radio Star That I Are" Parlor E  
 Chairman: Bertram Barer, San Fernando State College  
 Speakers: T. Gregory, Pasadena City College; Frank B. George, Long Beach Unified
- H. "Painless Accountability: A Case History" English Room  
 Chairman: David Moore, Archdiocese of Los Angeles  
 Speaker: J. Scott Guerin, Systems Analyst
- I. "WEN" - Business Meeting (continuing) Parlor D
- 4:30- 6:00 p.m. VISIT EXHIBITS Rose Room
- 5:00- 6:00 p.m. NO-HOST RECEPTION IN EXHIBIT AREA Rose Room
- 7:00- 9:00 p.m. SHOW'N TELL: TAPE AND FILM PREVIEWS Regency Room
- 8:00- 9:00 p.m. CALIFORNIA STATE COLLEGE ITV Golden Gate Room  
 COORDINATORS BUSINESS MEETING Room

WEDNESDAY, MARCH 1, 1972

- 8:30- 4:30 p.m. REGISTRATION South Lobby
- 8:30- 5:00 p.m. NAEB-WEST JOB CENTER Parlor G
- 9:00- 5:00 p.m. EXHIBITS OPEN Rose Room
- 9:00-10:00 a.m. GENERAL SESSION #4 Concert Room  
 "Public Broadcasting - Another View"  
 Speaker: Mr. Antonin Scalia, General Counsel, OTP

- 11:30- 1:00 p.m. VISIT EXHIBITS & LUNCH
- 11:30- 3:00 p.m. CALIFORNIA TAC LUNCHEON & BUSINESS MEETING Parlor C
- 1:00- 2:00 p.m. CONCURRENT SESSION & EXHIBITS
- A. "Make Public Relations Work For You" Parlor E  
 Chairman: Walter J. Schaar, KSPS-TV, Spokane, Washington  
 Speaker: Robert Mott
- B. "Low Cost Production - Part I" California Room  
 Chairman: Thomas Meador, San Diego State College, San Diego, California  
 Speakers: William Maheras, San Diego State College; Gary Statler, San Diego State College
- C. "'Sesame Street' and 'The Electric Company' Utilization Techniques" French Parlor  
 Chairman: Mike Shapiro, CTW, San Francisco Area  
 Speaker: Vivian T. Riley, CTW, New York
- D. "NPR - Jesus Christ Superstar" State Suite 240  
 Chairman: Parke Blanton, National Public Radio  
 Speakers: Lee Frischknecht, NPR; Elizabeth Young, NPR; Al Hulsen, Corporation for Public Broadcasting
- E. "CCTV in the Secondary Schools" Concert Room  
 Chairman: Donald G. Kirkorian, Fremont Union High School District, Sunnyvale, California  
 Speakers: Ted Clarke, Shadle Park High School, Spokane, Washington; Michael Biele, Lynbrook High School, Sunnyvale, California
- F. "Medical Teaching Center: Design Consideration" Forty-Niner Room  
 Chairman: Thomas Banks, U. C. Medical Center  
 Speaker: Joel L. Amromin, U.S.C. School of Medicine



- G. "Cable: Medical Information  
Dissemination" Regency Room  
Chairman: John Cardenas, Cablevision,  
Channel 6, Santa Rosa, California
- H. "Assuring Cost Effectiveness" English Room  
Chairman: Walt Robson, Jr., Hewlett  
Packard, Palo Alto, California  
Speaker: Robert Walcher, Naval Amphibious  
School, San Diego, California
- 3:15- 3:30 p.m. BREAK
- 3:30- 4:30 p.m. CONCURRENT SESSIONS & EXHIBITS
- A. "Need Money? It's There for the Asking" Parlor E  
Chairman: Roland E. Fenz, Corporation  
for Public Broadcasting, Washington, D.C.
- B. "Low Cost Production - Part III" California Room  
(Continuing)
- C. "S.C.A.: I Am Curious Radio" Comstock Room  
Chairman: Wendell Dodds, University  
of Nevada, Reno, Nevada
- D. "Satellite Broadcasting via Mini-TV  
Transmitters for Rural Areas" Royal Suite 262  
Chairman: Charles M. Northrip,  
University of Alaska  
Speaker: Robert D. Arnold, Alaska  
Educational Broadcast Commission,  
Executive Director
- E. "Cassettes and Cartridges: State of  
the Art" Forty-Niner Room  
Chairman: Robert Moffett, Golden  
West College  
Speaker: Joe Roizen, Telegen, Palo  
Alto, California
- F. "Where's the Action?: Career  
Opportunities" English Room  
Chairman: Sharon Greenwell, NAEB,  
Washington, D. C.
- F. "The Many Faces of Western Canada ETV" French Parlor  
Chairman: Dr. Richard Bell, University  
of Calgary, Alberta

**Speakers:** John Philpott, Director of TV, L.T.U., Faculty of Education, The University of Calgary; Mr. Dieter Nachtigal, Producer-Director, MEETA (Metropolitan Edmonton Educational Television Association, ETV Station), Edmonton, Alberta; Mr. Irving Schieman, L.T.U., University of Calgary.

**H. "T.L.C.: Television's Learning Contribution"** Regency Room

**Chairman:** Thomas Banks, University of California, Medical Center

**Speakers:** Mrs. Betty Moffitt, R.N., Samuel Merritt Hospital; Thomas W. Washburn Consultant for Teleproduction, Merritt Hospital

**I. "Educational Broadcasting Institute Preview: Instructional Design"** Golden Gate Room

**Chairman:** Charles Vento, V.I.T.A., Sacramento, California

**Speaker:** Kenneth L. Warren, Head of Educational Services Division of Continuing Education, Oregon State System of Higher Education

**4:30- 5:00 p.m. VISIT EXHIBITS** Rose Room

**4:30- 5:30 p.m. CARRY-OVER SESSIONS**

**"Low Cost Production - Part IV"** California Room  
(concluding)

**"Radio West - Rebirth Ahead"** Comstock Room

**Chairman:** Tom McManus, KPBS-FM, San Diego, Calif.

**5:00- 6:30 p.m. CALIFORNIA WINE TASTING** Gold Ballroom

**7:00- 9:00 p.m. SHOW 'N TELL: TAPE AND FILM PREVIEWS** Regency Room

**THURSDAY, MARCH 2, 1972**

**8:00-10:00 a.m. GENERAL SESSION #5** Gold Ballroom  
**Best of WEST Awards Breakfast**

**9:00-12:00 n EXHIBITS OPEN** Rose Room

**10:00-10:15 a.m. BREAK**

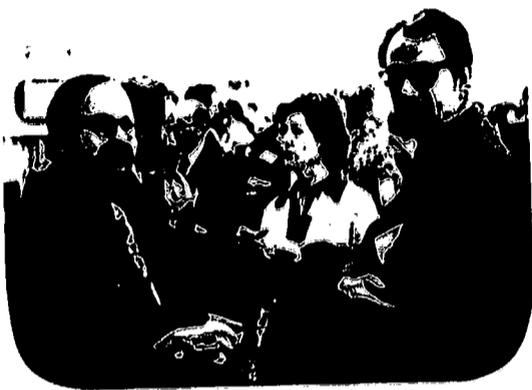
11:15-11:30 a.m. BREAK

11:30-12:30 p.m. GENERAL SESSION #7

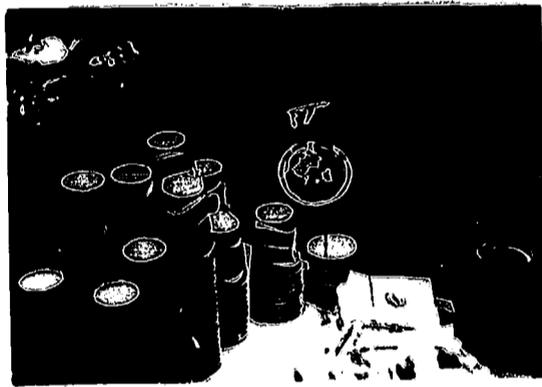
Concert Room

"Telecommunications in a Changing  
Educational World"

Speaker: Dr. David P. Gardner, Vice  
President, University of California

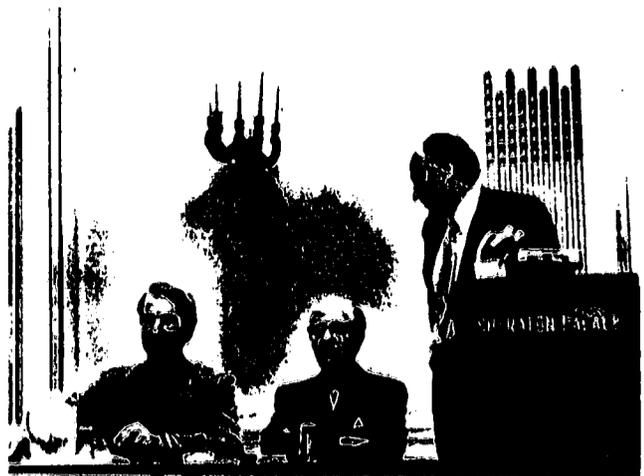


# COFFEE



# BREAK





# GENERAL SESSIONS



FIRST GENERAL SESSION  
KEYNOTE ADDRESS  
MR. JAMES DAY  
President, Educational  
Broadcasting Corporation

Thank you Gary. I was of course delighted to receive your telephone call inviting me. I was very flattered. I was under no illusions as to why you invited me and I have in my mind's eye the long and distinguished list of speakers who turned you down. I have been in these kinds of committee meetings before and I know the results. They probably say, "Well, look at Jim Day--he's pretty vulnerable. He'll do anything to come to San Francisco in mid-winter," and indeed I would, and I'm delighted to be here; and I wouldn't have turned him down, whatever the task, even delivering this opening address and the opportunity of seeing old friends in the audience. If anything makes me happier than seeing old friends in the audience it is those new faces that Gary referred to, because those new faces are my only hope of not being found out too early.

Gary, I thought you had begun your introduction to me when you made reference to an artifact that bears some note. And I went half out of my chair. You did stir up some memories of those early days of what was then the Western Radio Conference, not even the Western Radio and Television Conference. The Western Radio Conference, as some of you recall, as I can recognize some of you who were there at that first conference, and what a long way we have come from the Marine's Memorial to the Sheraton Palace! I couldn't help but think as you said that you were indebted to this year's

conference chairman, how I was conference chairman that first year and no one was indebted to me except that the organization was indebted to the Marine's Memorial and remained so for a number of years.

When Gary phoned, he asked if I would send him a copy of my talk. I'm not given to writing or reading speeches, not because it's a bad thing but because it's a hard thing. And when I asked why they wanted the speech written out, they indicated that if anything important was to be said they could get it in the hands of the press. I decided, therefore, not to say anything important as a means of avoiding that kind of obligation; but I'm afraid the temptation did cross my path and I decided that I would and have, as a matter of fact, written my talk. That will guarantee its dullness, if nothing else. It, however, has some weaknesses as all of my talks do. I had proposed to write it several weeks ago, and with each passing day something got in the way of my writing it. First it was Woody Allen. Subsequently, it was the stewardess serving drinks, and then only yesterday it was good tennis weather. But I was able to make some notes in long hand which are totally undecipherable and knowing that, I thought I would type it out this afternoon. I was able to borrow the office and the typewriter, unknown to him, I regret to say, of my successor in San Francisco. And it was in Dick Moore's office that I typed out the first five pages of this. Three producers walked by and saw me sitting in Dick Moore's chair. Two of them quit, thinking it was a coup d'etat and the third offered me a program idea thinking I was the head of PBS. I did make one last effort, I must confess, to get the whole thing typed tonight so I wouldn't have to stumble through it. About 6:30 tonight I phoned room service and asked for a drink and a typewriter and only one arrived.

In three months, I will have completed nineteen years in public television. I am indeed an artifact. And yet at no time in those nineteen years, and there have been very dark days as many of my colleagues here know, have I felt less sanguine about public television's future than I do tonight. As it nears the end of what must be its most successful season to date, success which is measured in terms of program quality and reception, and I know of no other

measure, public television finds itself the target of politically motivated attacks and the object of political manipulation. Its leadership has continued to operate on the false premise that the people's right to know is subject to negotiation and occasionally to compromise. The policies and actions are based too often, in my judgment, upon political rather than programmatic consideration. It's torn with internal dissent, the product I believe of a muddled self-image compounded by a diffused power structure that has led to internal fighting that would do justice to the feudal wars at an earlier time.

The consequences of all this is difficult to project, only because the course of politics itself is not always a long and straight or even a rational line. It is very apparent that what is likely to emerge will be neither stronger nor better than what we have today. And what we have today is not yet good enough. I doubt that public television will die and where it is firmly established, as it is in this city, I doubt that it can be killed. But the prospects are unhappily strong that it will be starved. In his recent and very excellent report for the American Civil Liberties Union entitled "Public Television-- A Question of Survival," the case was succinctly put by its author:

"It is not likely to starve to death," he wrote of public television, "the medium is too far along and too institutionalized for that. The danger is more closely akin to the sort of starvation that afflicts the children of the poorest families in much of the nation. There is enough food to stay alive, but the lack of proper kinds of food leads to irreversible damages to the brain, the body and the spirit."

I would add to sustain or perhaps to strain the metaphor that if we permit Dr. Whitehead to operate on the body of public television and remove its vital organs of news and current affairs and opinion, it will not be worth our time to keep the body alive and certainly not with a diet of public funds.

Because the matter of public affairs and public television is one that is very close to my heart, the temptation is almost overwhelming to use this platform tonight to respond to Dr. Whitehead. However, I find his recommendation that public television not compete with commercial television in the areas of news and public affairs so patently ridiculous that it virtually

answers itself. When one realizes that commercial television devotes a scant 2% of its prime time to news and public affairs in a country where self government is dependent upon an informed electorate and whose people when polled cite television as their principle source of information, the only wonder is that the present administration would permit itself to be identified with such a ridiculous and self-serving position. One hopes it will not.

At the risk therefore of seeming to minimize the difficulties besetting public television from outside its own ranks, of which the apparent reluctance of President Nixon's administration to provide adequate funding insulated from government control, is certainly the most urgent, I should like to address myself this evening to some of our internal problems and most specifically to three of the issues which seem to divide us from each other. These schisms sap our energies, waste our time, and make us look foolish and confused to the outside world.

In his excellent book, entitled Television, Les Brown devoted a chapter to public television. He proved himself a keen and knowledgeable observer.

"Given a choice within a new system," he wrote, "the local educational licensee produced too many voices. Suddenly an idea that had once seemed clear and concrete to everyone, independent advertiser-free broadcasting, meant something different to each and the Carnegie Report, notwithstanding, public television became a name without a concept."

I believe the concept as articulated by the Carnegie Commission still lives in such outposts as Boston, San Francisco, and New York, and other places. Our weakness lies in the fact that through the diffusion of power within the system, through our timid fear of strong leadership, we have allowed a situation to develop which is not unlike that of pre-DeGaulle France-- a multitude of political parties built around an idea, a variant of an idea, a strong personality, or the hope of more money. As a consequence, we have confused our friends and confounded our own high purposes. The political lines, it seems to me, are drawn on only a handful of basic issues, none precisely defined nor surely perceived. Centralization versus decentralization, national versus local programming, sometimes defined as the

fourth network versus the bedrock of localism, and finally the differences between public and educational television. These issues are central to what we are and what we want to be when we grow up.

I would like to make some observations on each of them in turn in the wistful hope that perhaps I can succeed in de-mystifying public television for the layman and the less talented unmuddlers in our midst. Good luck to all of you!

One of the most intense in terms of debate at the moment centers on the subject of local versus national programming, as though there were, in fact, a rational choice to be made between them. Two weeks ago, FTC commissioner Nicholas Johnson addressed a Harvard Law School quorum on "Death Before Life," a case study of public broadcasting. He observed that "Total reliance on either national or local programming is a fallacy. It is part of what is called 'the politics of scarcity!'" It put the question in those 'all or nothing' terms. It is like choosing between police protection and hospitals and schools. There is no such choice. The present struggle is largely economic with very scarce funds available, the majority of the public stations want more for themselves and less for national programming and projects. They have as their ally the aforementioned Dr. Whitehead, who wants the money to go directly to the stations without passing through the corporations of public broadcasting, the instrument created for that purpose by the Congress. They also have on their side public television's friends in the House and possibly in the Senate where the legislation now in progress would have the money pass through the corporation who would still mandate the percentage of the gross appropriations of corporations that would go for local station support.

It hardly needs to be added that these proposals have the support of the majority of the station managers around the country. Two such organizations would be NAEB whose recent testimony in the House sought to have the percentage that goes to the stations increased on an annual incremental scale that would reach 70% of the gross in five years. The stations have certainly made their desires and wants known. Even the sponsor of legislation, presumably public television's friend in Congress, expressed amazement at what he terms the greed of the stations.

But local programming is important and essential for another reason. It links the viewer with a tangible world that he, as an individual, has the power to accept. The world of Walter Cronkite's CBS evening news is largely an abstraction to those of us sitting in front of our television receivers. The world in which you and I live and move every day is not. It is important that local programming serve this need to function and to function effectively in that tangible world.

What then is the purpose of national programming? Too many in our profession, seizing upon the Carnegie Commission's call for diversity in programming and program courses, have perceived national programming as the sum of its local parts; programs made around the country in a spread of production centers that together make up a kind of program pastiche of locally produced efforts, ostensibly drawing upon the great cultural diversity of this country. Programs like that woman from Pasadena who learned to cook in France and broadcast from Boston. Of course, this idea is nonsense! Just as local programs are rooted in that diversity which sets us apart and draws upon our regional differences, so should national programming be rooted in those commonalities which unite us as a nation--"E Pluribus Unum"-- you read it on your money. Pluribus for local and regional programming and Unum for national programming. Its single-minded objective should be excellence--excellence wherever and in whatever form it can be found, in thought, in performance, in creative enterprise.

Incidentally, let us not be too embarrassed if we frequently find it in New York. That city, with all of its shortcomings, which I have come to know rather well, cannot be ignored if our criterium is to be excellent. The length to which we have gone in public television to pretend that New York doesn't exist have taken on the trappings of the theatre of the absurd: from the Carnegie Commission's efforts to dilute the power influence of the center of this center of liberality and sinfulness with the diversification of production to PBS's choice of Washington as a base for the fourth network, so as not to confuse it with the first three.

I have no quarrel with the idea of strong local programming--far from it. I will take second place to no man in public television in the strength of my convictions about the need for and the efficacy of locally produced programming. I trust these convictions are manifest. The programming that has been done these past years here in San Francisco on KQED is now being done by WNC in New York. But before I join the chorus of upraised voices in a hymn of praise to the bedrock of localism and urge my congressman to support those bills which mandate a given percentage of the pitifully scarce dollars to local stations (for what, incidentally, I think are largely political reasons) I would like to examine more carefully whether first, these dollars divided among more than 150 local stations will result in programming that will be a better service for our audiences, or whether the audiences may be better served during this time of wholly inadequate funding by putting these dollars that we have this year into major audience building national productions. Secondly, whether the cries of poverty and destitution being raised by some of my colleagues are both true, since crying poverty is addictive in public television and not the result of such other factors as weak management, weak governing boards, indifferent licensees, unimaginative local programming or whatever. And thirdly, whether the long range consequences of removing the leadership and decision function of the corporation by allowing congress to mandate those decisions for it, will not be worse than the problem it seeks to cure.

I have as many reservations, I suppose, as the next fellow about the corporation's priorities, but the remedy, it seems to me, lies within our relationship with the corporation, not with seeking to exert pressure upon the corporation through the federal government at the very moment when one of our highest priorities is to remove the corporation and not the whole public television system from the dangers of governmental interference.

The Carnegie Commission, rightfully in my mind, placed emphasis on the importance of vigorous and effective local programming. The members of that commission saw the wide range of programming and programming sources. The key word was diversity.

I was reminded of this self-consciousness from New York and the search for cultural diversity through decentralization while watching public television several weeks ago. (I watch public television, my favorite channel, quite frequently--not always soberly.) From the great state of North Carolina I saw Firing Line. Bill Buckley, former candidate for the mayor of New York and as much a part of New York as the Bethesda Fountain, had flown south to abet the myth. From Chicago came Book Beat. Bob Cromie's guest that evening was the assistant curator of the Whitney Museum--that's in New York. The Advocates that week dealt with the question of whether New York should become the 51st state. One of our cultural treasures, Congresswoman Bella Abzug, flew north to Boston for that one. Louis Freedman, who still maintains an apartment in New York, on Hollywood Television Theater (the very name conjures up thoughts of orange groves, sunshine and clean air) presented us that week with a rerun of a play he had done with a public broadcast laboratory several years ago when he was working in New York. Of course this happened to be the week also when PBS shared with us for the first time that powerful little corner of Manhattan Island called Wall Street. The host of Wall Street Week is appropriately from New York, and the guest on the opening network show was the president of the New York Stock Exchange. Did the program come from New York? Of course not --it came from Maryland, and not even Baltimore. It came from Oving Mills, Maryland--that's a decentralized Baltimore. With such herculean efforts (and now I'm down to the handwriting, incidentally, so I may have to stumble here) with such (that last thought so boggled the mind that I couldn't on on with the typing. Actually I was using an electric typewriter and it kept typing out PBS and I couldn't stop it) with such herculean efforts to pretend there is no New York, it might be simpler to dismantle New York and ship it around the country. It would certainly relieve the traffic problem.

But let me return to the matter of national programming for one further observation. It has to do with the concept of a "user-managed network" as embodied in the public broadcasting service. Originally conceived as a distribution mechanism for programs (and Hartford needn't take notes, it's not an attack upon PBS, believe it or not) it has evolved into a fourth network and we shouldn't be embarrassed or ashamed of that fact. But its governing

board, a majority of elected station managers, grows out of an earlier concept of a distribution mechanism and clearly does not fit the concept of a national network. These managers, however carefully selected by their own peers, do not represent the national interest nor do they represent the public. The public in public television is, and always has been, represented by lay boards of directors, disinterested citizens, drawn from the community at large, hopefully representative of the diverse cultural composition of these audiences. These lay boards, as everyone in this room knows, set policy for our stations. The professionals do not. Isn't it odd that we have contrived to have these same professionals set policy for our national service? The argument that it has raised in defense of this arrangement is that it is "democratic." Of course, it is not. As Les Brown has pointed out in his book, "What is democratic about the present public television system? When the Board of Directors of PBS is made up of local station operators, that is not democracy but oligarchy." (That is the end of the quotation from Les Brown and he'll be delighted.) Moreover, it is surely not in the interests of the broader national public to be served to have those men who determine in their respective communities what their public shall see and not see, hold at the same time the power of determining what shall be fed into the system from which these choices shall be made.

If we truly believe in a public broadcasting system controlled by the public and not by the professionals who are today's pharisees, then we must find the means to place the controlling policy of PBS in public hands. We have such citizen control in all of our stations. We had it in the NET Board of Directors when that body was the counterpart of the national network and the national program policy groups. It is ironic and indefensible that a system which calls itself public, now has only one national board of private citizens--the board of the Corporation for Public Broadcasting--and that board, because of its method of appointment by the President, is politically oriented. There is, of course, the National Programming Advisory Council under Norman Cousin's leadership, but it has no one to advise. The group that needs the kind of citizen advice it can offer, PBS, has no connection with the National Programming Advisory Council and thus the citizen is denied his voice in the system.

I feel certain that we can devise a plan which will provide that voice, perhaps a plan that still maintains the present station representation that draws upon our citizen's board rather than upon our professionals. Such a plan would have one further advantage, it seems to me; it would help remove us professionals from our present preoccupation in national public television policy and allow us to go back to building a better service for our constituents.

The current dispute over centralization versus decentralization is closely linked, of course, to the dispute over national and local programming. Centralization is, to use Dr. Hayakawa's terminology, the "snarl" word and decentralization is the "purr" word. Centralization suggests all the evils of control by an elitest group. Decentralization is one of our best guarantees against that control. Of course the argument is largely absurd in the terms of the public television system in this country today. American television, commercial and public, is a decentralized system and no network, first, second, third, or fourth is going to change that fact. America has one of the very few television systems in the world where the means of access to the audience, the transmitters, are independent and autonomous in the national program service and are equipped to originate local and regional program services in addition to or in lieu of the national program service that is supplied to them. That seems to me is the essence of decentralization.

In public television we have not only maintained the local control inherent in the commercial model, we have, in addition, built regional and statewide networks to enhance diversity through decentralization. But given this decentralization through local control, it is absurd, it seems to me, to attempt to carry decentralization into that part of the public television equation that is national programming. The national program service is an entity, balanced, diverse, interrelated, but an entity, nevertheless; and it can only be produced where there has been gathered a sufficient body of tools and talent to guarantee the excellence that we seek. This need not be one place, but it certainly will not be many places.

It is significant that our greatest program success to date, Sesame Street, is a product of an autonomous, centralized, production unit. The fact that the

public broadcast service has moved from a distribution mechanism to a fourth network is simply recognition of the absolute necessity for centralized control. We shouldn't shun that fact nor apologize for it. It is one of our best guarantees of a national service of excellence in quality to supplement the local and regional service. It is not difficult to foresee the day when PBS exercises far greater control over national services than it does now, provided our objective is better programs and not political accommodations to the stations. But I would hope that you might guess, as I said earlier, that before that time is reached we would have placed PBS under the governance of a lay citizen board and removed it from station policy.

Finally, and you thought I wouldn't make it, I come to the third issue which divides us--public versus educational television. It's more than a difference of words--it is a difference of philosophy. It centers on the idea of what it is that we want to be when we grow up. Sadly, we are now in our late adolescence without having made that decision. There are those among us who believe our roots are in the educational institutions of this country, many of which are licensees of our stations. To the disciples of this philosophy, our major, if not sole purpose is the application of television technology to the educational problems of our people at all levels. Certainly this was in the minds of some who gave us our beginnings. I think, for example, of the FCC commissioner, Freda Hennig. She spoke often and hopefully of the "little red school house of the air." More recently, John Macy has laid stronger emphasis in his talks upon the corporation's responsibilities in education. Whether he does this out of philosophical conviction or out of pragmatic needs to win congressional favor, I do not know. But despite our almost two decades of efforts in this direction, we have produced only one outstanding success--The Children's Television Workshop. The failures in the area of instruction are legion. In the midwest airborne project there is a plethora of locally produced school programs that only in rare cases rise above the level of pedestrianism.

On the other hand, there are those who believe that our major purpose lies in the broader areas of public television, from which nothing is excluded--

sports and entertainment as well as cultural and current affairs programming--providing our principal criterium is excellence. This point of view, to which I subscribe, was well articulated in the Carnegie Commission report. It's manifest in such systems as the BBC and NHK and is represented in our own PBS schedule at its best. Does it compete with commercial television? It does and should, much more effectively than it does now. Why? Because the public is far better served by this competition. One need only note the response of commercial television to Sesame Street or Masterpiece Theater or The Great American Dream Machine. It is the kind of competition that results in a greater range of programming available to the viewer on all channels, unlike the competition among the commercial networks which, for reasons that are already known to this audience, results in a narrower range of choices and a quality that cannot rise above the level of the lowest common denominator. Because each operates on a different set of premises, commercial television sells audience by mass appeal; public television solicits audience by an individual appeal to quality. Both are essential if we are to be as well served by our broadcast system as we have every right to expect and demand.

How then to resolve these differences among us between those who would favor educational and those who would favor public television? The Japanese have found an answer. In a simple device of a first and second network--one devoted to the broader public programming, the second dedicated to quality education. We, it seems to me, should do no less. In many of our cities there are more than one public television channels in operation. There are four in the San Francisco Bay Area. There are four in the New York City area. For the most part, these channels broadcast the same national programs, some of them reluctantly, but faced with the necessity to fill the hours with the lowest possible cost, they have little choice. Given the meager dollars now available for programming and operation in public television, this it seems to me is a shameful waste of our resources. If we had a second network (and I cannot believe given the money we spend for education, we cannot afford it) the second and third channels could be put to useful, constructive and valuable purposes. In those communities where only one channel exists, the local management could opt for one or the other service or probably a combination of both.

Programming for the second educational service could originate from a series of autonomous production units, modeled after the Children's Television Workshop, and like CTW, bringing together the authority of educational research and testing for the skills of television production. There could be an adult television workshop, a workshop for ethnic minorities, a workshop for the elderly, one for the teenager, producing a high quality product to meet our needs. We have the imagination, we have the skills, we have the mechanisms to carry it out. The usual question is, "Can we afford it?" That was, I think, adequately answered by Joan Cooney. She raised the same question in her original application for funding to CTW. Her response in that application was, "Can we afford not to?" Subsequent events have proved her right.

The concept of two national educational or public networks, each built upon vigorous and effective local programming as well will require a far higher commitment of federal funds than Congress or the administration now envisions. These levels should be at least five hundred million dollars this year. While this amount of money will solve some of our problems, and lessen those differences that grow out of the politics of scarcity, it will not solve them all.

One of these, it seems to me, that public television suffers today is the second class status of public television in some of our major cities by virtue of the UHF channel assignment. It is unthinkable that we can permit this to continue now that public television has demonstrated its efficacy in the television scheme of things. It is also indefensible to ask the public to go into the market place, as we have done in New York City, and purchase, at greatly inflated rates, the franchise that belongs to the public in the first place.

The solution, it seems to me, is for the federal government to redress the unfair and unwarranted imbalance between commercial and public television created by its own action perhaps by the exercise of eminent domain with fair compensation to the present licensees. The question of which of the existing channels should be returned to the public is, of course, a difficult one. But whereas in the recent case in Los Angeles one was offered for sale to the highest bidder and none were willing to bid high enough, there should be

no question. Perhaps since the success of commercial television is measured in terms of profitability, it should be that channel with the lowest profit margin. That would get them going, wouldn't it? By whatever means and with the most equitable approach, the government owes it to the governed to take positive action to place the public's television on a par with the television of private interests and to do it soon and at government's expense.

It is now more than six years since the Carnegie Commission studied and deliberated and issued its report. It's provided a model whose weaknesses and strengths have been revealed through our efforts to implement it. It is not too soon, it seems to me, to begin work on a second commission, not to update the earlier report but to reexamine the problems and the opportunities and to reapply our wits and imagination to solving the problems and capitalizing on the opportunity. But this time let's not make the mistake of treating non-commercial television as though it bore no blood ties to its commercial brethren. Public television is not the clay that fills in the chinks of commercial television. It has a symbiotic relationship to it and together, in their quite different ways, they should combine to serve the social, political, and recreational needs of our society. You cannot examine one, with this measure in mind, without examining the other; and given the probably course of future technology, cable should be a part of that study.

We fall easily into the habit of referring to technology as the servant of mankind. If this is so, and I believe it is, then the time is long overdue when the technology of television, private and public, should be put to the measure to determine who is the servant and who is the master and to take the necessary steps to see that both public and private television, each in its proper relationship to the other; jointly serves the best and most constructive needs of our society.



TELECOMMUNICATIONS  
CENTERS: TOMORROWS ROLE

MR. WILLIAM G. HARLEY  
President, National Association of  
Educational Broadcasters

Thank you Harold, my old, old, old, friend and colleague. Members of WEST, ladies and gentlemen, I am testing 1, 2, 3. This unusual diaphrasing gives me the capacity to tell an old gag. Remember the one about the two radio announcers that get on the elevator on the top floor of the RCA building. One of the elevator operators says, "Floors, please." The first announcer says, "Fifth floor" and the other announcer, not to be outdone, says "Basement, please." This vocal condition, I hasten to say, results not from exposure to the "friendly skies of United" or to "the sunny climes of California" but due to my constant exposure last week to the constant winds that blow in the United States Congress. No, not really. What happened was I gave a speech up in Sacramento last night and somewhere along the line, blew a gasket I guess. But I do want you to know that despite this sort of inadvertent Gabriel Heater tone, that I don't mean what I am about to say to be quite so oracular as my voice would suggest.

There are a number of reasons why I am pleased to address a meeting of WEST. First, you always seem to have your meetings in the most agreeable places; second, it provides an opportunity to meet with a large number of the NAEB membership whom we do not get to see very often; and, third, this is the only meeting in the country which schedules, as far as I know, an annual Wine Tasting Party. All I can say about that just now is that I'm glad to see that it's scheduled for tomorrow night rather than last night!

I am tempted to say a lot of things this morning but I don't really have the opportunity to say everything. The controversy about public broadcasting, and within public broadcasting, has done a lot recently to obscure the accomplishments in this area of public communications. It has also contributed to a confusion of basic issues in the field which are increasingly advanced as those of life, death, or malnutrition. The impatience about the public discussion of public broadcasting's future direction and scale is rather troublesome to me, for it suggests that just a very few people should be entrusted with these discussions, that those who are affected by them should hold their tongues, as the decisions on these long range questions should be made by those in national positions who really know best. Now it's tempting to devote my entire remarks particularly to the problems I see in this kind of paternalistic way of dealing with the future. But in a sense, I have, not as a consequence of recent events, but on some other accounts.

There is another reason why this particular WEST meeting is important to me and that is the reason for my invitation. When this was discussed with Gary Hess during the NAEB convention in October, Gary said that he was interested in more than the standard report from one of the many presidents of national outfits in public broadcasting and communication technology.

He said that his interest in scheduling this address related to a paper the NAEB released last spring dealing with the development of public telecommunication institutions.

Frankly, that interests me more than a routine Presidential report, too. So I accepted with the understanding that I would discuss some of the reactions that we've had to that paper, the refinement that we have been making in the concept itself, and some of the steps we're planning in the immediate future.

First, something about the concept itself. You may recall that we suggested that today's educational television and radio stations, along with various other kinds of distribution systems, should be moving toward the development of telecommunications centers. It seemed to us then, and it seems

to us now, that the institutions and people involved in today's educational media operations should be exploring ways to improve their capacity and effectiveness as instruments of public service and community education.

In my remarks to the NAEB Board of Directors last May, I said that "those involved in educational broadcasting should begin at once, to plan for expanding their broadcasting stations into public telecommunications complexes for the design and production of educational, instructional and cultural materials to be carried to the home or school by whatever electronic delivery system is most suitable. This new institution would employ a range of distribution techniques such as television cartridge systems, ITFS, and cable, as well as audio media (radio, cassettes) as a way of undertaking an increasing number of essential communications responsibilities.

Such a Telecommunications capacity should be established as the publicly responsible mechanism for the professional planning and execution of strategies designed to accomplish significant instructional and social tasks within the community. Building on its experience, expertise and leadership in public telecommunications, this (formerly broadcast-only) enterprise should exercise professional supervision over the planning, production, acquisition, distribution, utilization, and evaluation of a wide range of communications services to be effected through its multiple facilities.

"The optimum arrangement for such a complex," I suggested, "would be to have it serve as a head-end for not only radio and television broadcasting, but for community ITFS and, most important, for cable systems. In any case, it should have ready access to the widest range of electronic distribution systems."

In essence, the telecommunication strategy deals with fundamentally new approaches, not only to the distribution but also to the generation of software.

This is not just a matter of keeping up-to-date; it is, in our judgment, a matter of public necessity that the modern communication technologies that this society has developed be used for much more significant social and educational tasks than anyone has undertaken this far.

The reactions we've had to this notion have been most encouraging, and they constitute an awareness, I believe, that the present institutional forms and arrangements leave a great deal to be desired. This is an odd conclusion for those who believe that public broadcasting has just come of age, or that it is at least about to come of age in spite of the inadequacy of our federal financing to date. It gets more money, more audience, and more attention than ever before; but it also gets more criticism, more demands, and is becoming more anxious than ever before.

Part of this is a natural consequence of popularity and attention, but it is also a consequence of the expectations that the public at large, and that we as professionals are beginning to develop.

We are beginning at last to realize that the public broadcasting system, the counterpart non-broadcast systems that we have built, while important and worthy of sustained and increased support, is based on some out-dated principles that grew from technological limitations which are not vanishing. I think that the reactions we have had to the Telecommunications Center idea constitute evidence that a number of our colleagues throughout this field are sensitive to this point and wish to explore the best way to move from some of the old institutional formats and purposes to new ones.

In our statement concerning the Telecommunications Center suggestions, we indicated that the NAEB would design and conduct a special seminar within our Educational Broadcasting Institute program in order to initiate the kind of professional development effort which needs to accompany an important new concept. Such a seminar was held about a month ago in Washington, D. C. Forty individuals attended, constituting just about the most diverse cross section of NAEB constituencies that has ever been gathered together in a group that size.

We had five of our Board members present--voluntarily--, engineering consultants, directors of state educational television authorities, community station officials, university executives, a foundation program officer, teachers, students, instructional television planners, adult educators, attorneys, and even some members of our own staff.

This Seminar reviewed the basic characteristics of the new communication technology, giving detailed reports and background reading material concerning cable, cartridges, cassettes, video discs, and broadband communication systems; it reviewed the programming obligations and opportunities that are opened up with telecommunications capacities; it explored facilities and staff resources that might comprise a telecommunications complex; the kind of organizational structures that might be necessary, taking into account the social forces at play throughout the country and in individual communities; finally, the seminar outlined the current legislative and policy tendencies to ascertain whether they contributed to or neutralized the efforts which are moving toward the telecommunications approach.

(I should say that this seminar in Washington was something of a pilot effort and we are interested in conducting it in other parts of the country where interest is expressed.

One such place is in the Appalachian region of the United States, and we are working now with the Appalachia Regional Commission to develop the seminar in ways that will make the concept especially appropriate to the needs and activities within that area. If at this WEST meeting there is sufficient evidence of interest in this notion, we would also consider holding such a seminar in this area.)

Our work in preparing for the Seminar has helped to refine the concept that was presented in my paper last May and I think it would be useful to outline this for you briefly.

PROJECTION: SLIDE 1

Currently, the relationship between the educational broadcasting stations and their communities illustrates the limitations of the past. As you can see in this representation, the fact that there is but one channel of communication constitutes a limitation in the station's capacity to relate to the community, in the community's capacity to relate to the station, and in our concept of what community needs and services can be associated with communication technology.

The one-channel limitation is an easy one to dramatize: when Sesame Street is carried, the school service has to be trimmed; when worthwhile public affairs programs from national sources come along they may displace important and worthwhile programs of a regional or local nature. It is as if all public service and instructional programming needed to be fed through an eye dropper--one program at a time, in sequence. Jim Day's suggestion that I understand he made last night for a second national network for education would help alleviate this limitation, but we would still be left with a very substantial impediment, and both our institutions and our concepts have developed with the handicap. With specific regard to education, the capacity has not enabled us to deal with enough of an educational problem to make significant and basic differences in educational results.

Even today's multiple-channel closed circuit or ITFS systems have embodied this same limitation although for them it is unnecessary. They are, for the most part, one-way distributors of fairly standard instructional television fare, often using station call letter designations and operated as if they were two, three, or four stations-in-one, and there is some question about how well they manage to ascertain and meet community needs even when the community is just a discreet campus or a single school system.

PROJECTION: SLIDE 2

The Telecommunications concept moves away from those limitations. With it, we foresee quite different institutional arrangements, based on the extensive new capacities that are associated with the newer communications technologies. We see the possibility that existing educational stations, or new consortia of educational interests will be developed to manage the community's access to and operation of technology for educational and public communication. The institutions of the future will need to be quite different from the relatively elitist structures that now govern most of the new educational and communication facilities of this country. They will need to be opened up so that community involvement is not simply an obligation, but a way of life. The growth in capacity will make this practical and will result in new ways of using existing and new facilities.

What are some of the uses ?

For this, I turn to a paper by Bob Smith, who has worked with our staff in developing this concept. Bob is general manager of a new station in Annandale, Virginia and has given considerable thought to the possibilities that are before us.

"First, it will be a media facilities center where all sorts of public groups can come and actually use communications tools, cameras, audio and video tape recorders, film editors, audio mixers, broadcast facilities....

"I can see this Telecommunications Complex as a place where media interest groups of all ages--teen-agers, professional people, housewives and senior citizens--might be enrolled in classes offering sportscasting, TV drama, media program budgeting, or instructional design.

"I can visualize, too, that the Complex might serve as a media library and duplicating center where individuals and groups might come to preview programs, tape programs-off-the-air or from audio or video recordings, or check out cassette programs on loan.

"The Complex will, of course, be a program origination point and will have to be equipped with multiple studios for the production of live programming for over-the-air radio and television broadcasting, cablecasting and ITFS transmissions, as well as for filming and for recording on audio and video tape.

"The studios will be manned by professional staff, but occasionally they will be available for rent to public groups who may wish to supply some of their own staff and equipment.

"The Complex will be a valuable source of expertise to the community in the complex business of helping to fit the medium to the message. For instance:

The City's Youth Corps Director wants to show show teen-agers how to go about applying for a job. We could help him design and produce video tapes, involving skits with young volunteer actors on a low budget. In the idiom. Then send it out on ITFS to storefront learning centers throughout the city, with question-and-answer feedback to a job counsellor.

"For instance:

The local Medical Association wants to initiate a regular service for doctors and hospital staffs, up-dating professional information and keeping subscribers to the service abreast of recent medical findings and recommended practices. Because of the proprietary nature of the information, it is decided that--pending the activation of the cable service--the information bulletins will be video taped at the Telecommunications Complex and bicycled to local hospitals and medical centers on a monthly basis. When the cable is installed, there will be a dedicated channel for medical service with limited access to hospitals, clinics and doctors' offices. As medical people and the telecommunications staff work on plans for the use of the dedicated channel, new plans begin to take shape, and eventually, when two-way cable service is activated, it is planned that a telemedical consultation service will be initiated, linking a central medical staff with storefront clinics manned by trained paramedical technicians.

"For instance:

The police department has been working with the Community College to develop a new two-year police science curriculum. They have decided to make a part of the curriculum into a television-and-radio series, both for the benefit of young police recruits who are training on-the-job, and also as a means of promoting police-community relations. They ask the Telecommunications Staff to help select program units from the curriculum which will make good programming. In the process of working out the series, the police department gets several new ideas on how to use telecommunications more effectively in the day-to-day operations of the department and begins to plan actively for their use.

"For instance:

A consortium of educators from public schools and local universities organizes to experiment with courses offered outside formal classes. Subject matter ranges from high school equivalency to graduate-level credit courses, and includes general enrichment. Originally, the courses were designed to be offered over the local ETV station, but the consortium is now considering the feasibility of delivery in several different modes, wherever possible with simultaneous production. Courses could be:

broadcast live over educational television to the home, with a viewer response capability by return telephone,

or transmitted over ITFS to neighborhood learning centers with an audio return feedback,

or packaged into video cartridges as an individualized, programmed instruction course with branching capability and self-testing exercises built in,

or administered through a CAI terminal located in the home, the learning center or the library, linking the learner to the computer through a time-shared cable channel.

"The task of serving the varied needs of the community will involve many kinds of expertise. Of course, the telecommunications staff will have to understand media so as to be able to help locate the best existing materials to do the job. If there are none--or if there is a particular need for locally-produced materials--the Telecommunications Unit should be able to help with the practical decisions about which medium is appropriate, what is a realistic budget, and what resources are required.

"One of the main reasons for creation of a Telecommunications Complex will be to help combine and coordinate community resources wherever practicable. For example, a program on local facilities for care of the elderly might be jointly produced by a medical center, a group of nursing homes and the Red Cross chapter. A telecommunications job reference center could be sponsored cooperatively by the local Chamber of Commerce and the State Employment Commission. Neighborhood child care centers might enter into an agreement with a local graduate child development center to produce new learning materials of all kinds, from simple graphics to computerized instruction to live video taped classroom "visits" to bicycle between child care centers--or to broadcast and share with pre-schoolers at home.

"What I'm trying to stress here," Bob wrote, "is that one big job of a Telecommunications Complex is going to be to get people together to do the communication jobs: educators and businessmen, police administrators and civic groups, a combination of public and private hospitals, a consortium of social agencies at federal, state, local and neighborhood levels.

"This will become necessary because modern telecommunications cost money--but not only because of the money. Also because of the increasing need for effective communications and public accountability. All too often we find today in the city that there are widely diffuse efforts going on among several public groups all working on the same problem with little or no effective coordination or communication between them. One of the main tasks of a Telecommunications Complex is to help correct this wasteful situation and start 'getting it all together.'"

That's how Bob Smith envisions the social uses of the Telecommunications Complex. As you can see, it can be the mechanism for stimulating the intellectual life of the community, for interchange of ideas and views, for debate and discussion of public issues, for involvement of the citizenry in a new kind of public forum for creative interaction between professional groups--a vigorous force for enhancing the intellectual and social development of the community.

It is clear from the magnitude of the concept and the range of these new services, that we shall need to undertake a comprehensive effort to explore the main conditions which will affect the development and implementation of the telecommunications concept. Toward that end, we are planning the establishment by NAEB of four Working Parties which will be comprised of members of our Association who have expressed interest in working with us to outline the dimensions of the activities ahead of us.

The Working Parties will deal with:

1. Structure (governing boards, community representation, policy systems)
2. Technical Systems (production and transmission facilities)
3. Staffing (professional development needs and new skill requirements)
4. Social Tasks (programming areas, ascertaining and serving community needs)

We do not expect that these Working Parties will come forward with an explicit blueprint for all to follow, but that the process of working on these topics will identify the special problems which will need to be dealt with to achieve an orderly transition from the benefits of our current practices to the much larger and more substantial benefits that can be expected in the age of telecommunications.

That is what we as an Association plan to do; at the same time, I think that every individual here has an obligation to pursue this notion in his own community and in his own position. The educational stations who are

represented here need to open up their governing structures; they need more extensive community representation and interaction and it will be wise to initiate it before it is demanded.

I might say that this is quite counter to the tendencies of centralization which are still so very much present in many parts of the field.

But these tendencies are the last gasp of those who believe that controversy can be made intellectually safe and that the "right man" with guidelines and an advisory panel will be able to assure journalistic integrity and supervise the operation of the First Amendment.

In addition to opening up the structure, the stations and others involved in non-broadcast systems need to work together on more joint assignments and tasks. Not everything which is done at a station needs to be broadcast and not everything initiated by non-broadcast groups needs to be hidden from the public. It is time to consort and collaborate, not to compete and connive.

At the same time, it is essential that all of the existing organizations involved in public broadcasting and communication technology increase their capacities to design effective program materials and units which will respect the need for economy and accountability.

Finally, in order to benefit from and accomplish an "opening up" of the structure, productive consorting and the improvement of our capacities to design materials, it is necessary to expand our delivery capacity-- new formats, more channels, audio and video, broadcast and non-broadcast.

It will require a lot of juggling, and an ability to see the whole concept at once, but it will be an act in which many publics at last will be able to participate in public broadcasting and public education.

I am reminded, in concluding these remarks, of a concluding paragraph from the Report of an NAB Board Committee on Long Range Planning. Its report which I commend to you, is in the February 1970 issue of the Educational Broadcasting Review, and the final paragraph is appropriate to what I have been saying and I hope what you have been thinking:

"In regarding all the exhilarating potentials of technological change... it is advisable to keep in mind that technical innovations themselves will have but little constructive impact upon our ways of doing things unless we are imaginative, resourceful, and skillful in applying them to the efficient execution of our ethical responsibilities. The very marvel we may feel toward the new machines, materials, and techniques may induce us into a trance of ineffectual optimism. We must be careful that when confronted with the opportunity to take a giant step forward that we do not merely stand back in awe."

I hope all of you picked up this letter from Washington that NAEB produced. It's got a digest of the legislative situation which I am going to embroider to some extent. So this may be redundant for some of you, but for others it may be fresh répertoire. I am going to give you a quick briefing and try to distill a very complex and confusing situation for you.

There are four pieces of legislation relating to the extension of the Public Broadcasting Act which are currently before the House of Representatives. Actually, you don't have to be concerned with two of them. There are only two that really count: HR 11807, submitted by Representative Macdonald from Massachusetts, who is the chairman of the Committee on Communications and Power of the House Interstate and Foreign Commerce Committee. The other is the bill submitted by the Administration, presented by Tom Whitehead of the executive office of Telecommunications.

The Administration Bill is at the low end of the situation, seeking 45 million for one year for the Corporation for Public Broadcasting, with 15 million of that amount earmarked to go to the stations--two million of it to radio stations and 13 million to television stations.

Mr. Macdonald's bill is substantially better from the standpoint of the welfare of the stations and for the total enterprise. First of all because it ranges from 65 million in fiscal 1973 on over a five year period to 160 million. It earmarks a minimum of 30% for so called community service grants to stations. This piece of legislation was introduced by the Corporation when it appeared that the Administration was never going to come forward with a piece of legislation of its own, despite the fact that they made

some abortive efforts in this direction last August and have been constantly promising that they would bring forth a bill. They didn't get it in until the last day of the hearing before Mr. Macdonald's committee, but I must say that this is the first time that the Administration, other than the original presentation of the bill, has come forward with some legislation. Others have promised. The present administration finally did come forward with a bill, although it is only for one year and it is only for a total of 45 million dollars.

Well, what's going to happen next? Yesterday afternoon, the sub-committee was scheduled to mark up the bill and sit down and figure out what they were going to do. But the word is that Mr. Macdonald has got the flu and he didn't come to town and I suspect that they won't begin this week. In Washington they already have the four day week. They don't get there until Tuesday and they leave on Thursday--it's a very short week--and I suspect nothing is going to happen with marking up the bill this week, but eventually they are going to sit down (that's the subcommittee) and make some modifications in Macdonald's bill, probably in the direction of the Administration bill. But I suspect that they will cut down the amount of money for the first year from 65 to something like 50 or 55--something along that line, and they certainly will reduce the span over which the authorization is extended. It calls for five years, but that is unrealistic. The House of Representatives has never authorized more than three years for anything and they are not about to do it with this piece of legislation. So three years is the maximum that we can anticipate, and we will be lucky to get that. I guess the lowest that it could fall to would be the Administration Bill--45 million for one year. We certainly will try to get beyond one year, which is manifestly impossible to work with. Nobody can plan on that basis. We have certainly got to have two years and three years would be much better so we are going to work very hard to get that.

Now, as most of you know, there has been some difference of opinion between the NAEB view and the Corporation's view. The Corporation, obviously, since it had this piece of legislation introduced, supports the Macdonald bill completely. The Macdonald bill provides that the distribution of funds to the

stations be done "in consultation with representatives of the educational broadcasting field." The NAEB feels that this doesn't provide sufficient assurance and had suggested a modification in which the language reads that the distribution and the eligibility and whatever kind of formula is to be developed that would govern the provision of funds to stations, would be done with the agreement and concurrence of the elected representatives of non-commercial educational broadcasting. That's the essential difference.

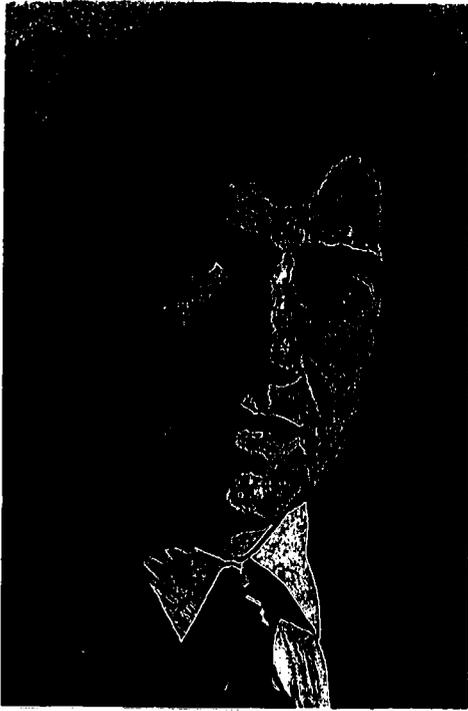
Now, we are not doing this to be troublesome and difficult. We would hope that we can get together on this. Really what we were doing first of all was to be sensitive to the Corporation's insistence that no written formula for distribution of funds be in the actual legislation, as it is in the Administration bill. We think there are many things wrong with that. You get stuck with an approach for one year that may be carried on for the next year if you put dollar figures in the formula as the Administration Bill does. It is very easy for appropriations committees to chop down dollar amounts, etc. So we, too, do not believe in printing a formula in the legislation if we can prevent it.

So what we have suggested as an alternative to that is more binding language that gives us greater assurance that, indeed, we will have a voice in determining the approach that is used in distributing the funds to the stations. Actually, we have been operating on a formula of an informal nature, worked out between the stations and the corporations, and it has worked very well and it might very well work just as well in the future, but we don't know. We don't know what their replacements may be like or what they may think or do, so all we are asking is that we have legislative reassurance that the station's voice will, indeed, be represented legally in these discussions. That is what the NAEB is holding out for and we are going to have to get in some hard discussions with the corporation and try and get a common position.

Just a quick run through of what has to happen in this whole legislative process. I mentioned that the sub-committee would mark up the bill.

That has to go to the full committee. They then will report it out. It has to go to the Rules Committee, which often is the graveyard of pieces of legislation (we don't anticipate that it will be that in this case); but the Rules Committee does what they call giving a piece of legislation a rule-- that means they schedule it for a hearing on the House floor, on the agenda, so it can be debated on the House floor. In the meantime, we have to go through the same rigamarole up in the Senate. Senator Pastori, who is head of the sub-committee in the Senate of the Senate Commerce Committee, will be holding hearings on all of these bills, plus one of his own, which is merely a piece of continued legislation at the present level of funding. And then, when they come up with a bill, there will have to be a conference to iron out any differences there may be between the House and Senate versions; and finally, we will get some kind of legislation that will go to the President for signing. We are not done yet though. That just gives us authorization; we still have to get the money. We have to go through hearings in both the House and Senate Appropriations Committees before we can get fixed dollar amounts put into the bill. You can authorize all kinds of things but then you go through that screening the tough Appropriations Committees give you and that is a "rough go", because everybody wants more of everything and they have millions of demands and they have a 40 billion dollar deficit.

So, it just shows you it is a long, long road we have got to follow. And very clearly, the corporation, the NAEB and all the rest of the elements in the public broadcasting field have got to get together in a common position we call all support, behind which you can unite, because we are going to very desperately need the help of everyone in this field if we are going to succeed with this legislation.



**CATV -- THE ELECTRONIC  
CLASSROOM**

**MR. GEOFFREY M. NATHANSON**  
**President**  
**Optical Systems Corporation**

I had the privilege of addressing a meeting in Los Angeles last Saturday sponsored by the Academy of Television Arts and Sciences. The theme was "CATV and Broadcast Television, A Positive Approach to Coexistence." One speaker representing the broadcast industry, a top executive at one of the three major networks, stated before an audience of 1,000 people that he did not believe that cable would ever develop into anything more than a method of redistributing television signals into those areas where reception was a problem, that there was not enough money to build the wired nation, and that the television networks and the independent television stations in this country were doing an adequate job of satisfying the needs of the American public.

The incident reminded me of a marvelous bit of memorabilia that Irving Kahn used to quote in his speeches. Some of you may have heard it: It seems that some ninety years ago, Western Union management commissioned a committee to evaluate the market potential of an invention developed by a man named Alexander Graham Bell. Let me read, if I may, the following excerpts from the committee's findings:

The instrument's inventor, one A. G. Bell, sees for it a vast future as a means of personal communication by voice. He actually believes that one day they will be installed in every residence and place of business. This

fellow, Bell's, profession is that of a voice teacher, and particularly a teacher of the deaf. He appears to have had no previous experience with any other form of communication, electronic or otherwise; yet he claims to have discovered a concept which has been overlooked by hundreds of experts who have spent years in this particular field.

Bell's proposal to place his instrument in every home and business is, of course, fantastic in view of the capital costs involved in installing endless numbers of wires.

Bell expects that the individual home owners will use his instruments without the aid of trained operators. This is ridiculous, of course. Obviously, the public cannot be trusted to handle technical communications equipment. Furthermore when making a call, the subscriber must give the number verbally to the operator, who will have to deal with persons who may be illiterate, speak with lisps or stammer, have foreign accents, or who may be sleepy or intoxicated when making a call.

Bell expects that subscribers to his service will actually pay for each call made, and that they will agree to pay a monthly minimum if no calls are made. We feel it is unlikely that any substantial number of people will ever buy such a concept in view of the fact that there are telegraph offices now giving efficient round-the-clock service in every neighborhood, in even the smallest towns.

In conclusion, the committee feels that it must advise against any investment by Western Union in Bell's scheme. We do not doubt that it might find a few users in special circumstances such as between the bridge of a ship and the engine room, but any development of the kind and scale which Bell so fondly imagines, is utterly out of the question.

They were right, of course; how could they know that Don Ameche and Alice Faye had such big plans for the telephone?

Well, it looks as though CATV is here for real. There are some 2,750 cable TV systems across the country serving about 18 million viewers in over 4,500 communities. That's about nine percent of the U. S. television audience, and I can tell you that if it hadn't been for a government imposed

freeze on the expansion of the cable industry during the past five years, there would be 50 million cable viewers in this country today.

As educators and communicators yourselves, I'm sure each of you has watched very carefully the growth of this new medium. I'm sure you have read everything that's been published relative to its technological potential, and I'm sure most of you have read about the new F.C.C. decision to lift the freeze effective March 31, and ease the restrictions against the importation of distant signals into the top 100 markets to the extent that we can expect to see cables going up in this nation's major population centers.

The new rulings came about as a result of a so-called compromise between the trade associations representing the cable industry and the broadcast industry. This compromise was refereed by a blue ribbon committee of White House higher-ups appointed by President Nixon, himself. As expected, the F.C.C. virtually rubber-stamped this committee's recommendations over the objections of a couple of commissioners who felt that though the trade associations had been satisfied, the public was being sold down the river. The compromise does indeed limit the economic viability of cable television in the larger markets in its endeavor to protect so-called free television stations; but I, for one, feel that there are still entrepreneurs willing to gamble that the television viewer will pay to watch an additional station or two.

You have heard, and will continue to hear, plenty of flack from the industry's P.R. types about what the new CATV rules and lifting the freeze is expected to mean to the growth of the cable industry. But the F.C.C. did something else. Something for the pragmatists among us. Something the press overlooked. Something that is going to help the cable industry fulfill all of its promises; and something of vital significance to everyone in this room. I'm referring specifically to that portion of the new rules that deals with "channel access."

Recognizing the technical capacity of coaxial communications, the F.C.C. stipulated in these new rules that all new cable systems in the top 100 markets must carry 20 channels or more. They further required that at least half

of these channels be made available for access or lease to others. In so ruling, the F.C.C. has made a partial common carrier out of the cable operator. They have opened the door for entrepreneurs of all kinds who have something to say, something to sell, and something to teach.

Let me spell it out for you. The government has required that for each broadcast television signal carried, cable systems must provide an additional channel for either public access or lease to others. They went a step further and specifically designated that one channel must be dedicated for non-commercial public access, available at all times, without charge, on a first-come, first-served, non-discriminatory basis. They dedicated a second channel for educational use, and a third channel for local municipal governments.

The ruling that deals with this particular allocation may come as a disappointment to some of those educators who have been urging municipal, state and federal government agencies to allocate a half dozen or more free channels for educational purposes. But additional channels are available for lease. Sure, you will be expected to pay a small rental, but I can assure you that the rental will be modest, especially for those who wish to use cable channels for non-commercial purposes.

Recognizing the ultimate importance of two-way communications via coaxial cable, the Commission is going to require that cable systems build into their main distribution lines the capacity for return communication on at least a non-voice basis. This will make possible a limited form of student-teacher response, which will hopefully lay the groundwork for exciting new mass teaching techniques.

The Commission did not, however, require cable operators to install return terminal devices in the subscriber's home. It's up to you, the educators, to develop new teaching systems, the market for which will justify manufacturing and installing such devices.

These access rules pre-empt the assignment of non-broadcast channels by municipal governments. The F.C.C. obviously feels that the public interest is best served by standardizing the allocation of the cable spectrum, though

they have promised to listen to special petitions and to remain flexible should it be in the public interest to modify these rules at a later date.

Much to the surprise of those of us in the cable industry, the F.C.C. went still another step further. When they said open channels, they meant unrestricted use of these channels. The new rules state specifically that with the exception of certain prohibitions relating to lottery information and obscene or indecent matter, the cable operator may not in any way censor or exercise control over either the program content or any other material presented on either the public access channels or the leased access channels.

In concluding that portion of the new regulations relating to channel access, the Commission did not fail to overlook those existing cable systems presently operating in the top 100 markets. These system owners will also be expected to comply with the new rules. Though the Commission gives them five years to do so, I would expect that they will voluntarily make their channels available as their systems are rebuilt to accommodate the demand for cable channels which will accrue as a direct result of the entrepreneurial hustle of what we will soon recognize as a new breed of American communicator.

Let's talk about this new breed of communicator: He's a practical businessman, who will realize that access to cable channels does not necessarily guarantee access to the CATV subscriber's home. He will look to the commercial marketplace for the development of appealing services with which to get in the door, so to speak...services that the CATV subscriber himself will either directly or indirectly underwrite.

The value of these services will be determined by the content and the variety of choices available. I sincerely believe that CATV subscribers will pay for programming which is otherwise unavailable on conventional advertiser supported television. It is now technically possible to transport a signal over the coaxial channel in such a manner that it can be received only by a subscriber who is willing to pay directly for the opportunity to view the particular program transmitted. It's a form of pay television via cable. We call it pay cable.

Pay television has had a rough go of it over the years. The same private interest groups that have used propadanda and political muscle to impede the growth of CATV have given much the same to pay TV, in spades. They have done everything possible to mislead, confuse and even frighten the American public in an effort to protect their stranglehold on the entertainment business in this country.

But some interesting changes have taken place in the last few years. The federal government, after studying the results of various pay TV experiments, promulgated rules in 1969 that were designated to encourage the development of pay television and at the same time protect the economic viability of conventional broadcast television. Those of you who are broadcasters are probably aware that these rules were designed to prohibit the siphoning of programming presently available on advertiser supported and so-called public supported television.

The Commission's new rules make a specific point of emphasizing the fact that the government recognizes the importance of pay television and the role it will play in determining the success of cable TV.

A recent Rand study maintains that special pay channels may be important, if not crucial, to the viability of cable in major cities, especially in the light of the compromise relative to distant signal importation.

Pay cable channels are created by scrambling the programming at the source of origination and then selectively unscrambling it at the subscriber's television set. This technology has been developed. The programming, which may be live or pre-recorded for playback on film, video tape or video cassettes, is passed through a special modulator which encodes the video portion of the program and traps out the sound.

In order for the subscriber to view this encoded channel, he must have a device which can, through the use of a special decoder, restore both picture and sound to their original mode.

Our company, Optical Systems, will begin placing our little decoder on television sets in CATV homes this summer in this country and in Canada. There may be companies utilizing our boxes or boxes manufactured by others who will be doing something similar.

We offer a cable subscriber the opportunity to purchase programs he cannot otherwise enjoy without leaving his home. This card, which is for demonstration purposes only, says "Los Angeles Lakers Season Ticket." This card says "UCLA University Extension Division Spring Quarter 1972." This card says "Pacific Theatres Season Pass." This card says "Frazier Vs. Ali Heavyweight Championship Fight." Programs such as these will be carried on the cable in a scrambled mode on those leased channels. They can be unscrambled by this "Little Black Box" provided the subscriber has purchased the appropriate card.

In the course of a year a new subscriber can choose from hundreds, and maybe someday thousands, of program possibilities. He can buy his tickets by the season or on an individual basis. He can buy his tickets in advance at any ticket office or he can order them by mail. With our patented system, he can also order up a program instantly by making a phone call.

And what's most important, there are six million American families already on cable today. No television station is required to transmit the signals, no expensive home receiver, no two-way terminal unit, and no need to dig up the streets and string the wires ... they are already there waiting for us and for you.

You see almost overlooked in cable's blue sky is the importance of channel access, and in particular, private channel access, to those who would utilize this medium to deliver mass education and instruction to American families in the comfort and privacy of their own homes.

Those of you in communications have long recognized the value of television as a mass teaching device. Schools and universities have used closed circuit television to deliver lectures and supplementary material to their students via coaxial cable. Both commercial and non-commercial television stations have also broadcast courses of one kind or another that they felt might have particular appeal to their audiences. Of course, in all due respect to the latter, these courses are generally offered at hours when those who need them most are winning bread to feed their families.

Only cable, with its magnificent channel capacity, can afford to devote prime time viewing hours to teaching a man to speak English properly, or run a power lathe, or solve an accounting problem.

It's certainly not my place as a layman in the field of education to tell you how best to utilize this blessing modern technology has given to you with the help of an enlightened Communications Commission in Washington.

Is it not conceivable that ten or twelve university extension courses could be video-taped and offered to students who cannot attend college classes? Upon paying his tuition, a student could receive a card which entitles him to receive the lectures or demonstrations being originated. Let's speculate that the channel carrying these courses is being leased by UCLA. On cable systems in Los Angeles? Sure...but why not also offer UCLA Extension courses to cable customers in Grand Rapids, Michigan, or Laredo, Texas?

As I understand it, the concept of television teaching on a mass basis is one that is in practice today; but with the exception of some medical instruction for which a special receiver is required, the televised lectures, etc., are available to all viewers. I am referring to projects I have read about such as the Chicago TV College, the Open University in London, and the Bavarian Telekolleg.

I can't help but wonder whether mere credit is enough of a lure to convince a student to enroll in and pay a tuition for something he can view at no charge. In fact, I can't help but wonder whether we lose a certain amount of sales value when we try to sell a man something he knows he can get for nothing.

I, for one, think the private channel will be a marvelous marketing tool, and you can still give a prospective student a sample class or two as a merchandising incentive simply by sending him a temporary card, good for one or two classes only.

We have done some fairly extensive study in the area of adult correspondence courses, only to discover that this is a field fraught with controversy.

Nonetheless, we were amazed to discover that over five million people are presently enrolled in correspondence courses of one kind or another; and with the exception of audio tapes, these schools are utilizing much the same teaching materials they have used for the past fifty years.

I'm not knocking printed matter ... it's essential ... and it's expensive and difficult to update or otherwise modify; and it's dull; and though it can illustrate, it can't demonstrate; and it's easy to put off today because it's always going to be there tomorrow.

Don't get me wrong; I'm not for one minute claiming that CATV will replace conventional teaching methods. Rather, CATV can and will enhance and reinforce the home study effort. The primary reason for TV instruction, as I see it, is to maintain and enhance credibility, motivate the student and thereby stimulate his desire to continue. We also feel CATV can have a commercial value to the educator. In short, we look to TV to help reduce dropouts, and thereby contribute directly to profit. Of marginal benefit which needs further exploration, is the possibility that TV can reduce the need for some printed material, as well as serve as a valuable marketing and merchandising tool.

I would urge that a pilot project of some kind be set up. Our company, Optical Systems Corporation, will be leasing CATV channels in San Diego, Santa Barbara, Bakersfield and here in the Bay Area beginning this year. We would be happy to volunteer private channel capacity on one of our leased channel systems. Programming for this pilot project could be underwritten by a school, a private institution, a trade association, a non-profit foundation, the federal government, or all five for that matter.

What I am saying, simply, is that the technology is there, and so are the students, all wired and waiting. The federal government has given us the green light. The cable can deliver your product to the millions who need you the most, the masses of also-lived, who had long ago thrown in the towel on self-improvement.

No need to wait for the super services, or even Don Ameche and Alice Faye. We've built the electronic classroom. We invite you to turn on, tune in, and teach.



PUBLIC TELEVISION AND  
PUBLIC AFFAIRS

HARTFORD N. GUNN, JR.  
President

Public Broadcasting Service

Quote: "I think by far the most important bill in our whole code is that for the diffusion of knowledge among the people. No other sure foundation can be devised for the preservation of freedom and happiness..." - Thomas Jefferson writing back to America from Paris in 1786.

(Thomas Jefferson, edited by Adrienne Koch, p. 35.)

Quote: "Despite specific examples of excellence, (commercial) network news and public affairs departments did not have a particularly happy year. Budgets, staffs and prime time devoted to journalism had shrunk to near invisibility - only two percent of all half-hour periods on commercial television networks in prime time." (The Alfred I. DuPont, Columbia University, Survey of Broadcast Journalism, 1970-71, p. 13)

Quote: "There is a real question as to whether public television... should be carrying public affairs and news commentary... the commercial networks by and large, do I think quite a good job in that area. Public television is designed to be an alternative to provide programming that isn't available on commercial television..." (Dr. Clay T. Whitehead, Director of the President's Office of Telecommunications Policy, to American listeners of National Public Radio; Washington, D. C., January 13, 1972.)

For those of us who have tried to think seriously about communications and education - (the dissemination of knowledge, if you will, its importance to a free society and how best to achieve it) - the statements just quoted are of great concern. If it were not for the significant pressures upon us, I'd let these quotations stand for your own reflection and judgment.

However, I don't think in our present situation that is good enough. The questioning is too sharp and the financial situation too serious. So, with your indulgence, I would like to review the questions being asked of public television and give you my answers for whatever value you wish to give them.

Let me say right-off raising questions about public affairs programming on public television - or about any other area of our activity - is appropriate for stations, citizens and all branches of the government. Questions, comments and criticism are always most welcome. What is not welcome, or appropriate, is for those in positions of real power to attempt to influence a public medium on the basis of their own personal biases. We all have our biases and our prejudices. But, by inappropriate attempts to influence our medium, I mean attempts to apply financial pressure to achieve objectives which are alien to the basic purposes for which public broadcasting was established in this country.

We have been told - "There is a real question as to whether public television should be carrying public affairs and news commentary."

I would like to try to answer that question.

Why, indeed, does public television and the Public Broadcasting Service do public affairs programming?

First, because the Federal Communications Commission and the Communication Act requires that the "public interest" be served. The courts and the Commission have interpreted this to mean, in part, providing the public "access to social, political, asthetic ideas and other experiences." (Red Lion Broadcasting Co. v. FCC, 395 U.S. at 390, 1969) They have stated that "speech concerning public affairs is more than self-expression, it is the essence of self government." (Ibid.)

Lest someone think we can fulfill our obligation in the public affairs area through concentrating on purely local issues, the FCC has defined public affairs in its license renewal application as programs and program formats "concerning local, national and international affairs." (395 U.S. at 394)

For many, if not most of the public television stations, this obligation can only be met in practice through the importation of programs from other stations and producers through a service such as PBS.

In the first place, therefore, we do public affairs programming because we are required to.

But that is not all. We also do public affairs because it was the express intent of the Carnegie Commission, as well as the Congress of the United States. As the report of the Senate Commerce Committee noted, public television should provide "in-depth coverage and analysis which will lead to a better informed and enlightened public." (Senate Report #333, 90th Congress, 1st Session, pp. 607)

Indeed, President Johnson in signing the Public Broadcasting Act on November 7, 1967 said:

"At its best, public television would help make our nation a replica of the old Greek marketplace where public affairs took place in view of all the citizens."

But perhaps even more importantly - we do public affairs - (not just because we are required to, or because we feel obligated to meet the intentions of those who created the public television system) - we do public affairs programming because we feel a moral commitment to use the communications tools of our time for the education and enlightenment of our people.

In short, we in public television do public affairs programming because we are required to, because we have been asked to and because as responsible citizens and professionals we want to.

Now, let's look at some of the other questions which have been raised recently about public affairs on public television. We are asked whether we should "be doing the same kinds of news coverage, the same kinds of news commentary."

Of course, the implication is that we are merely copying commercial television - doing more of the same.

Certainly, no one in public television can - or should - deny that we have been - and still are struggling with the question of precisely what our role in public affairs programming should be. Certainly, the commercial news organizations can and do perform certain public affairs services extremely well. But does anyone really believe the commercial networks have achieved such a standard of excellence - either in terms of quality, or in terms of the time they can afford to devote to public affairs - that they have totally pre-empted the field of public affairs programming on American television?

Have ABC, CBS and NBC said all there is to say in public affairs? I know I would not claim that for PBS and I doubt anyone in commercial television would claim that for themselves.

While we have a long way to go before we achieve our full potential in public affairs programming, I, for one, am not ashamed of the record. Indeed, I am proud of what we have accomplished in only two years.

Here are some examples:

A PUBLIC AFFAIR/ELECTION '72 is the only prime time program devoted to informing viewers about our country's political institutions and processes on a regularly scheduled basis. I believe, and hope, this is a series of greater importance in the long run than any mere recital of the actions or issues of individual candidates.

THIS WEEK with Bill Moyers is the only prime time program on national television which weekly devotes 30 minutes on a single public issue.

THE ADVOCATES is the only one-hour national debate on issues of significance to all Americans with the only opportunity for the public to record its desires. (And, since THE ADVOCATES went on the air, over a half-million Americans have responded by writing in their votes. How's that for the so-called passive American television viewer!

WORLD PRESS, WALL STREET WEEK, GREAT AMERICAN DREAM MACHINE - there are no equivalents or near equivalents on commercial television.

Or take BLACK JOURNAL - this is the only national program giving the black perspective on the events and issues that concern black citizens and one of only two national programs that are produced by and for blacks. By the way, both programs are on PBS.

Or take the interviews of presidential candidates, cabinet officers, administration officials, congressmen - the present and would-be "movers and shakers" of our government - on 30 MINUTES WITH with Elizabeth Drew. Again, the only regularly scheduled national program in prime time which attempts to do this.

Or FIRING LINE, with a leading conservative spokesman in a 60 minute prime time interview and debate.

Add to this such other programs as THE TURNED ON CRISIS on drug abuse for in-school and general audiences - special events such as the only live coverage of the historic U. N. vote on the admission of the People's Republic of China, and many others.

And speaking of China - public broadcasting sent to China with President Nixon the only correspondent who knows the Chinese leaders personally and, of even greater importance, a correspondent who speaks Chinese - the key to understanding China and its people. I am talking about Theodore White, of course, a distinguished journalist and author, who covered the President's trip for NPACT. Sadly, however, public television and the American people had to wait his return before receiving his commentary, insight and perceptions. The reason - public television could not afford the \$300,000 the commercial networks asked for use of the ground station in China and the Pacific satellite.

In many of these programs, issues and individuals have been presented that would not have been available through any other television network or channel. In those cases where the issues of the personalities involved have been the same as those that the commercial television networks or

channels were covering, often the amount of time we could devote to the issue has added a unique and vital dimension to the quantity of information available to the American public.

Again, I do not want to sound as if I believe we can sit back and rest on our "public affairs laurels." I do not think that. In fact, I think it would be considerably more constructive and relevant if today we were discussing how we could improve our public affairs programming - rather than talking about whether we should be doing it at all.

But the questions have been raised. We have been challenged. And I believe it is the obligation and responsibility of all of us in public television to respond. We have been asked if we are doing public affairs programming at the expense of educational programming - if, in fact, we are merely reaching out for large national audiences.

Well, if we are presenting informational material which is useful to broad- and large - segments of our population (and I surely hope we are), I am delighted.

But are we slighting our educational obligations?

As we all know, there is more to educational programming than formal instruction. Most of our public television schedules are devoted to instruction during the day. The evening hours, when adults are available, are given over to largely non-formal instruction for the simple reason that that is the way most adults prefer to take in their information - to say nothing of the fact that many topics about which a good citizen should be informed do not lend themselves to formal presentation.

In short, I believe the implication that we are emphasizing public affairs programming at the expense of educational programming is a spurious and ridiculous proposition.

In any case, the argument is totally without meaning because public affairs programming, by its very nature, is educational. Public affairs programming deals with contemporary issues, politics and events. These are the very ingredients of tomorrow's history books as well as today's political and social sciences.

I submit that it is impossible, indeed dishonest, in an educational context to preclude the discussion of today's issues. It makes a mockery of the educational process to close off the free and open examination of contemporary thought.

It has also been said that if we in public television persist in doing public affairs programs, we will "outrage the public."

To be precise, a new young Socrates - who suddenly has arrived upon the scene - admonishes us to remember that "No citizen who feels strongly about one or another side of a matter of current public controversy enjoys watching the other side presented; but, he enjoys it a good deal less when it is presented at his expense." (Clay T. Whitehead, Subcommittee Hearing on Constitutional Rights of the Senate Committee on the Judiciary, S.1311, Freedom of the Press, February 2, 1972, p. 869) The citizen, therefore, will complain to his elected representatives and the "inevitable" result is that you have politicized and distorted "an enterprise which should be above faction and above controversy." (Ibid.)

My first reaction to this kind of statement was that it was a bit insulting to the American people - because our entire system was built on a free exchange of ideas in which all sides have a chance to express their views.

And often in our system, this free exchange is paid for by the American citizen. Certainly, Americans have been willing to subsidize debates in Congress - sometime no side of which he agreed with - without suggesting the Congress be shut down.

My second reaction is that what they're really suggesting is that to eliminate the threat of government interference, we should eliminate public affairs programming. Frankly, that is like telling the newspapers the best way to stop government threats of censorship is to stop publishing.

Are we as Americans - public broadcasters, Congressmen, the Administration, all of us - so intellectually bankrupt that we can't devise a federally-funded national system of communication devoted to the public interest in all its aspects - free of inappropriate and dangerous influences?

We have a commercial television system that, with its acknowledged shortcomings, provides a level of service in those areas of its primary interests that is second to none.

Can we not as responsible representatives of the people design a complementary public non-commercial system to do what commercial television cannot do, or can do only occasionally?

Can't we have a public television system that is not limited arbitrarily, or by fiat, in its concern for human enlightenment or the human condition?

Must public television become a crippled supplicant, blind to the concerns of the people, begging year to year at the door of the people's servants?

The issue here is not a question of:

- program balance - public affairs versus cultural versus instructional programming - for we need and can have all three;
- or local versus nationally produced programming for we need and can have both;
- or duplication of commercial television for we have not;
- or of any violation of Carnegie, Congressional or Station intent or desire - for there has been no violation;
- or great public outrage over our public affairs programs for there has been none.

Rather, the issues here are twofold:

Shall public television - one of the best tools we have for public information and education - shall public television either by accident or design be blinded to the issues and events that shape our lives?

And, if public television is thus blinded, which of our country's institutions will be next?

No public affairs on commercial television?

No public affairs in the press?

No debate and instruction in public affairs in our educational institutions?

Thank you.



**PUBLIC BROADCASTING -  
ANOTHER VIEW**

**MR. ANTONIN SCALIA  
General Counsel**

**Office of Telecommunications Policy  
Executive Office of the President**

I appreciate the opportunity of appearing here today--and I hope to be able to attend various other functions during the remaining days of your Convention. I think it is important for those of us in Washington--both those who are in Government and those who represent the various segments of our society before Government--to leave off talking to one another periodically and find out what is really going on out there. And by "out there" I mean even out here . . . west of Buffalo. But there, I'm afraid I've displayed my Eastern establishment upbringing. I assure you that my provincialism is more than offset by the countervailing bias of the Director of our Office-- a Kansan who persists in referring to the area west of the Mississippi as "America." Seriously, however, I do think it important for those of us in an Administration which places great trust in, and lays great responsibility upon, local initiative, to keep in touch with local and regional organizations--both to make our views known, and to hear yours. And in the field of public radio and television, I cannot think of a better opportunity for such an interchange than this Convention--nor, of course, a more delightful location than San Francisco.

I would like to discuss with you today the Administration's position on the financing of public broadcasting. It is a subject which was literally the first major project which I undertook upon becoming General Counsel of OTP a little over a year ago--and one which I hope can be on the way to a happy conclusion before your next Convention. As you know, the Administration has introduced a bill, H.R. 13007, which would increase the annual appropriation for the Corporation for Public Broadcasting almost 30 percent--to the level of \$45 million--with a provision that one-third of this amount would be distributed among local educational radio and television stations, pursuant to a statutory formula based upon stations' non-Federal income during 1971. In the typical situation, the minimum grant would be \$50,000 per television licensee and the maximum \$180,000. To give a few examples of the way in which the formula would work: If our information as to non-Federal income is correct, KPBS in San Diego would get roughly \$87,000; KUAT in Tucson about \$75,000; KVIE in Sacramento about \$73,000; KQED and KCET the maximum of approximately \$180,000. We realize that even this increased level of Federal funds will not suffice to meet your needs. But in a year when Federal agencies themselves have been ordered to implement a 5-1/2 percent personnel cut, a 30 percent increase for the Corporation for Public Broadcasting is surely not bad.

But apart from the question of the level of funding, there is the equally important question of the term of funding. This Administration is committed to the principle of long-term funding--both in order to enable the system to plan orderly growth, and in order to afford it the greatest achievable degree of insulation from political pressures. We decided, however, that this was not the year to seek a long-range Federal commitment--for several reasons: First, it is a year of an extremely tight Federal budget. It hardly seems wise to seek to have public broadcasting's budget set for the next three or five years during a session when parsimony is in style. Second, it is a year when, for various reasons, the Corporation for Public Broadcasting has become the center of considerable controversy. Third, it is an election year, in which the most innocuous matter coming before the Congress can encounter politically inspired opposition, and in which the Congress hopes to adjourn by July, leaving little time for profound deliberation of many matters.

But even if all these reasons did not exist, there is another which alone suffices, in my opinion, to justify the Administration's approach of seeking only a one-year authorization at this time: I do not believe we all agree--you and I, the officers of CPB, PBS, NAEB, all those concerned with public broadcasting--I do not believe we agree on the goals which the permanent structure for public broadcasting should seek to achieve. Perhaps, to be sure, we will never reach substantial agreement; but at least the process of discussion and reflection within the public broadcasting community itself should be completed before the matter is taken on to the floor of the Congress.

I think most of you are familiar with the issues by now. They were raised publicly by our Director, Clay T. Whitehead, last October, after months of drafting and discussion had revealed a basic disagreement between our view of the system and CPB's. I would like, if I may, to describe those issues of disagreement by reading a series of quotations and comparing what they describe with the existing reality.

Quotation No. 1:

"The Corporation needs (the) flexibility (to arrange for interconnection facilities), not to establish a fixed-schedule network operation, but in order to take advantage of special or unusual opportunities . . . ."

"Section 396 (g) (3) precludes the Corporation from owning or operating 'any . . . network' . . . . It is assumed that, in compliance with this prohibition, the Corporation will not have . . . a system of fixed schedule broadcasting."

The Director of OTP did not write these words. They are taken from the Conference Report and the House Report on the Public Broadcasting Act of 1967. Yet five years later, in the public television field at least, we have--precisely--a system of fixed-schedule broadcasting. A system which operates--like the commercial networks--as a programmer, rather than a conduit for programming. Network hours scheduled in prime time alone are now 18.5 hours per week--not "to take advantage of special or unusual opportunities." but for Friday night movies, drama, musical performances, French cookery, and the like.

**Quotation No. 2:**

**"The greatest practical diversity of program production sources is essential to the health of the system."**

**"(An) element necessary to localism is to make an abundance of programming available to the local stations from major national production centers, independent producers and stations located in major metropolitan area."**

The Director of OTP did not write these words. They are taken from the Carnegie Commission Report which was the impetus for--and is the soul of--the Public Broadcasting Act, and from the testimony of the Commission's Chairman, Dr. Killian, regarding that Act. The Corporation for Public Broadcasting has asserted that it does provide a diversity of program sources, since it used programs from 27 stations last year. But during prime time (which is the only period for which we can readily compute the figures) over 90 percent of the programming came from six "national production centers," and one center produced over a quarter of this. And even more distressing than the small number of production sources is the apparently growing tendency toward centralization of program decision-making by CPB, so that even the five or six stations doing national programming do not represent an effective diversity of production initiatives.

**Quotation No. 3:**

**"One of (the Corporation's) . . . principal responsibilities will be to provide funds to the local stations."**

The source, again, is not the Director of OTP, but the House Committee Report on the Public Broadcasting Act of 1967. Yet during the entire period from FY 1969 to FY 1972, CPB devoted only \$11.7 million of its \$91.7 million total funds to station operating grants--less than 13 percent. Its record of support for local program production is even worse--in FY 1972, for example, by far its most generous year in this category of expenditure, only \$350,000--or about one-ninth what it spent on advertising and promotion for its nationally produced programming.

Quotation No. 4:

"Television should serve more fully both the mass audience and the many separate audiences that constitute in their aggregate our American society. There are those who would wish to look to television for special subject matter, such as new plays, new science, sports, not now televised commercially, music, the making of a public servant, and so on almost without limit. There are hundreds of activities people are interested in enjoying, or learning about, or teaching other people."

Again the author is not Clay T. Whitehead, but the Carnegie Commission on Educational Television. Yet in both FY 1971 and FY 1972, more than one-third of all nationally networked hours were devoted to a single subject: news and public affairs. The plan is the same for FY 1973. When one considers that approximately another third of all nationally networked time is devoted to Sesame Street and The Electric Company, there remains less than a third of the national schedule to do: adult education, drama, science, art, literature, music--in short, less than one-third for everything public broadcasting is supposed to do besides public affairs and children's programming. This, despite the fact that national news and public affairs exist on all three of the commercial networks. When is the last time you saw a live drama on the commercial networks? Or Gilbert and Sullivan?

Those are the issues we are concerned about--and from the manner in which I have stated them you may gather our positions on each. All of the issues relate ultimately to the center of gravity of the system: Is it to rest in the stations, with the Corporation facilitating the growth of community-based institutions, enabling them to produce and exchange local programming, and funding the production of some national programs for non-fixed-schedule distribution? Or is the central organization to be the heart of the system, with public broadcasting pretty much the same from coast to coast, except for an occasional substitution of a local program for the national network fare? The latter was not intended by the Act--but the Act can be changed. And there is much to be said for the centralized system. It is possibly cheaper, it probably requires less creative talent, and it surely produces a product of that uniformly high technical quality which our viewers have become used to. But it means the abandonment of public television as a medium which

can indulge distinctively local tastes and meet distinctively local needs. It means the abandonment of public television as the local and national outlet for local art, local scholarship, local creativity. It means, in short, the abandonment of public television as a community-centered enterprise, so that it ceases to be a stimulator, a generator of education and culture, and becomes just another show to watch on the tube--coming from New York, or Boston, or wherever.

I believe the choice between these two roles will be made this year. If, in connection with the major revision of the Public Broadcasting Act necessary to establish long-range financing, some device is not included to recall the system to its originally intended purpose, such recall will be permanently impossible. Indeed, it may already be too late. Surely there has already been a decay of the spirit of localism which once characterized the educational broadcasting system. How else to explain the fact--and it is a fact--that the stations themselves, as a group, have lacked either the desire or the courage to protest the obvious departure from the original intent of the Act? Are their memories so short that they forget what educational television once was, and was intended to be under the 1967 law? Or is it simply that they find it easier to plug into the national schedule than to seek out local needs, meet local interests, and develop local talent? Whatever the reason, the fact that it has had to be a government official rather than the stations themselves who raised the alarm about the direction of public broadcasting surely indicates that some sort of atrophy has already set in.

Of course 1972 is an election year--and, predictably enough, the Administration has for its pains been accused of innate hostility to public broadcasting. If you can reconcile that view with a \$10 billion increase in funding, you must be qualified to represent both sides in a future program of the Advocates (8:30 p.m. Tuesday, coast-to-coast on your fixed-schedule network). Less expected and more unsettling than the normal political criticism, however, was the recent assertion by the President of the National Association of Educational Broadcasters (NAEB) that "continued critical statements by

spokesmen for the Administration come very close to constituting Government interference with broadcasting." A response almost fails me. Vociferous criticism by this Administration might indeed have been unnecessary if the NAEB itself had more of a taste for principled controversy. Where were their Washington representatives when, over the past four years the local stations were being allotted less than 13 percent of the Federal funds distributed through CPB? Where were they while the diverse community system we once had was transforming itself into a Fourth Network? If the NAEB disagrees with our view of the Congressionally created plan for public broadcasting, then let it say so. But to suggest that the matter should not be vigorously discussed--by private individuals and public officials, by educators, station managers, producers, perhaps even by representatives of NAEB--is to avoid not only controversy but responsibility.

Perhaps at this point, we can do no more than continue along in the direction we have come. But at least let us do it with an awareness that it leads to a different system from the one conceived by the Carnegie Commission and enacted by the Congress. In his 1967 testimony on the public broadcasting legislation, Dr. Killian described the system as follows:

"It is to be constructed on the firm foundation of a strong and energetic system of local stations. The heart of the system is to be in the community. Initiative will lie there, the overwhelming proportion of programs will be produced in the stations, and scheduling will be determined by the local stations and staff. Local skills and crafts will be utilized and local talents tapped."

Your vision as educational broadcasters has never been distorted by rose-colored glasses, and it would take glasses of the deepest rosy hue for you to look at the present structure and maintain that it is on the way to fulfilling that promise.

If that promise can never be fulfilled, tell us so and we shall lower our sights and attempt to design a public broadcast system with more limited goals. But if the goals of the Public Broadcasting Act are still your goals--as they are ours--then let your voices be heard. Work with us to produce for the next session of Congress a legislative proposal which will provide long-range financing and will at the same time provide the incentives and controls that do not now exist to assure the local, community-centered system which the 1967 Act intended.



**TELECOMMUNICATIONS IN A  
CHANGING EDUCATIONAL WORLD**

**DR. DAVID P. GARDNER  
Vice President  
University of California**

Thank you very much. I must catch my breath. It was not so much the challenge of driving across the bridge in heavy traffic as it was dealing with a surly attendant at the parking garage. I regret the lateness of my arrival. I hope you will not regret that I arrived at all, having had the advantage, I gather only too briefly, of hearing from John Kerr. He's a great pleasure to have, not only as an associate and colleague in our work but as a friend. Gary Hess is a long time and very personal friend of mine and when he asked, I guess early last year, if I would be willing to join this conference I indicated my willingness to do so for I believe that those of you who are engaged in telecommunications, especially in the educational context, will be so instrumentally involved in affecting changes in higher education in this country the latter part of this century, that the opportunity to share some of my ideas with you and hopefully, in a brief discussion period to learn from you, was more than I could pass up.

Of the revolutions taking place in our time, one of the most significant and exciting from the viewpoint of educators must surely be the one in telecommunications, as I needn't tell you. The impact of scientific and technological breakthroughs in this area will in very major ways affect the entire educational establishment, and perhaps higher education even more than the lower

grades. It is my impression that the nation's major universities are stirring these prospects into their pot of long range plans, but in no way as confidently and assertively as the times and opportunities suggest.

Educators and telecommunication experts, quite obviously, must work more closely and cooperatively together in these times than they have customarily been willing to do in the past. Each must learn from the other for the common good if there is to be generated the momentum necessary to move the educational establishment into the last quarter of this century with the promise of continuing relevance. Similarly, telecommunications specialists will be well advised to improve upon their understanding of other forms of instruction. The ETV specialist is quite often as uninformed about computer assisted instruction as the CAI expert is about ETV, and both are not altogether comfortable in their knowledge of telephoning. We live in a fragmented world and that is one of our problems. Surely we who seek change ourselves must be willing to cross over our own specialties.

It was Marshall McClune who said that in the age of electronic technology we have extended our central nervous system in a global embrace, abolishing both time and space as far as our planet is concerned. And reinforcing his words and in quoting from Dynamics of Change, "All forms of information, oral, written, photo or drawing, whether on paper, film, radio or TV, can now be translated into identical electronic impulses which can be processed and either stored or transmitted anywhere in the world in less than 1/7 of a second."

As the multi-channel, closed circuit, educational TV systems are being considered and cable television moves into the more remote parts of the country, satellites promise to diminish the now dominant position of the networks, or at least will very likely tend to diversify them. As the use of satellites increase there will be an obvious trend toward the internationality of learning. As barriers of distance, geography, race, nationality, language and religion are brought down, a matter posing both immense problems and immensely exciting possibilities especially for educators, let us hope this opportunity is perceived and seized upon for the common good.

Within the context of domestic educational change, these forms of technology will most surely be converted into uses implicating virtually every aspect, more or less, of those served by our educational institutions--our time and places of instruction, our methods of teaching, and our curriculum. And I am convinced that after a period of careful and systematic experimentation, extending that already undertaken, with such forms of education, they will prove not only to be more generally acceptable to important parts of our student bodies but prospectively more cost effective as well.

More specifically, it seems to be quite clear that future generations of students will be less campus bound than have been those of the past. Technology in various forms will most likely, at least by the turn of the century, have transformed the campus from a center of learning into a learning center, one which houses a highly mobile population of students and scholars, a small residential population, for study primarily at the earliest and most advanced levels, a panoply of laboratories for advanced residential research and a network of integrated teaching resources, designed not so much for residential as for off-campus study. In short, a network of associations, arrangements and resources, that will permit the students to have the university with him at home, at work, and at his leisure.

The trend is moving, and quite rightly I think, toward a highly efficient, integrated communications system. Let us hope so. Satellites, not only for broadcasting directly into domestic home receivers, but for computer linkage in other common carrier functions and also as broadcasting stations for radio, television and facsimile. Coaxial cables, microwaves, lasers, and similar devices will broaden the classroom concept, not only for domestic but for more global purposes as well. Arthur Clark has said,

"The communications network of which the satellites will be modal points will enable the consciousness of our grandchildren to flicker like lightning back and forth across the face of this planet. They will be able to go anywhere and meet anyone at any time without stirring from their homes. All knowledge will be open to them, all museums and libraries of the world will be extensions of their living rooms. Marvelous machines with unlimited information-handling capacity will be able to speak directly into their minds."

The University of California, as indeed have other universities in the country, for two years has been exploring these possibilities as part of a larger effort to mount major university degree programs for part-time students studying on or off of these campuses. We intend to be experimenting the next two or three years with the educational problems inherent in such possibilities including those associated with the more aggressive use of educational technology in its various forms. May I share some of our thinking with you on the use of instructional technologies in the learning centers we expect to establish throughout the state for the off-campus component of these programs. I will have brief comments to make on television, auto-tutorial instruction, dial access systems, computer aided instruction, and film; and I draw my text from a report submitted to the President last fall by a university task force which had been for two years studying this problem. I have some extra copies here for any of you who may have an interest. It is titled, Degree Programs for the Part Time Student--A Proposal, and I am drawing from one of the appendices.

Television: Extensive use of television will be dependent upon a number of factors: 1) the geographic distribution of these learning centers; 2) the degree to which cable television facilities and/or satellite links can be scheduled for the distribution of programs; 3) the proximity of students to campus television facilities, and 4) the availability of television cassettes at a reasonably low cost. The use of television in extended degree programs should be considered as part of the total learning system to be used in conjunction with other media and materials where appropriate. Broadcast television over educational and/or commercial channels, ITFS, cassette television, local cable television, and even television distributed via satellite can contribute significantly to both economy and quality when appropriately used to further specific learning goals. The potential of the telelecturer, slow scan TV, the electronic blackboard, and other techniques for discussion in seminar use has not yet been fully utilized. These might provide invaluable vehicles for informal seminars at learning centers. These techniques, for example, could be used by the instructor to set the objectives of the student-led seminar, thereby saving valuable time for discussion rather than for a summary of basic facts or concepts.

Auto-tutorial instruction: If students are to be scattered throughout California and yet enrolled in the university, the learning centers will pay an important part in the extended degree programs. Faculty will want to make extensive use of audio cassette tape recorders which have the advantage of portability and low cost. A fully equipped auto-tutorial laboratory must be the core of any learning center no matter how distant from the university, providing students with the opportunity to learn within the facilities of the center as well as at home. Auto-tutorial methods of instruction have been widely used with great success on many campuses, especially in the sciences. Combined with the concept of self-paced learning, high quality study guides, seminars and individual tutoring, they provide an admirable vehicle for instruction at upper levels. The approach to learning also has the advantage of being comparatively low cost when pro-rated over large numbers of students and time. Many of these programs will have to make extensive use of auto-tutorial methods, if not for entire courses, at least for short modules of instruction.

The auto-tutorial format has numerous advantages, not least among them being the creation of team courses in which one can include presentations by leading authorities who might not even be on a university campus.

The cost of auto-tutorial instruction has been worked out in great detail. It is unlikely, however, that the learning centers will need large auto-tutorial centers as a small number of stations with a high utilization factor should satisfy most reasonable demands. In order to achieve maximum flexibility both in academic options and student learning, auto-tutorial methods should be available both in the learning centers and to students at home. The primary objective of the use of this method must be to increase personal contact between students and faculty, not decrease it.

Dial Access Systems: There may be considerable demand for foreign language study in the programs we envision. This would require the provision of language laboratory facilities in these centers. This could be done through two methods: the use of cassette tapes and telephone connection

to a campus dial-access system. Using as a prototype the installations already available in the University of California, this will permit the student to listen at home to language lessons as well as lectures on other subjects.

Computer Aided Instruction: The potential of computer aided instruction in university teaching has been reviewed by many authorities. The University of California has a reputation for its leadership in this field. Computers have a particularly important role to play in the development of gaming and simulation courses in a wide variety of subjects and in educational situations where the student is expected to solve problems or interact with data banked in a machine. Cable facilities should be provided in learning centers for computer terminals where appropriate for the courses offered. The use of electronic data processing for logistical support of these extended degree programs should be explored in detail to assure that every opportunity for effective electronic data processing support of this program is identified. In addition, careful study of the projected instructional requirements for electronic data processing support should be conducted so that they may be coordinated where appropriate with the logistical requirements.

Film: Film materials can be economically produced and presented when their use furthers established learning objectives. The video taping of certain films will also be carried out when that process will result in financial economies as well as convenience in utilizing available equipment in learning centers and on campus.

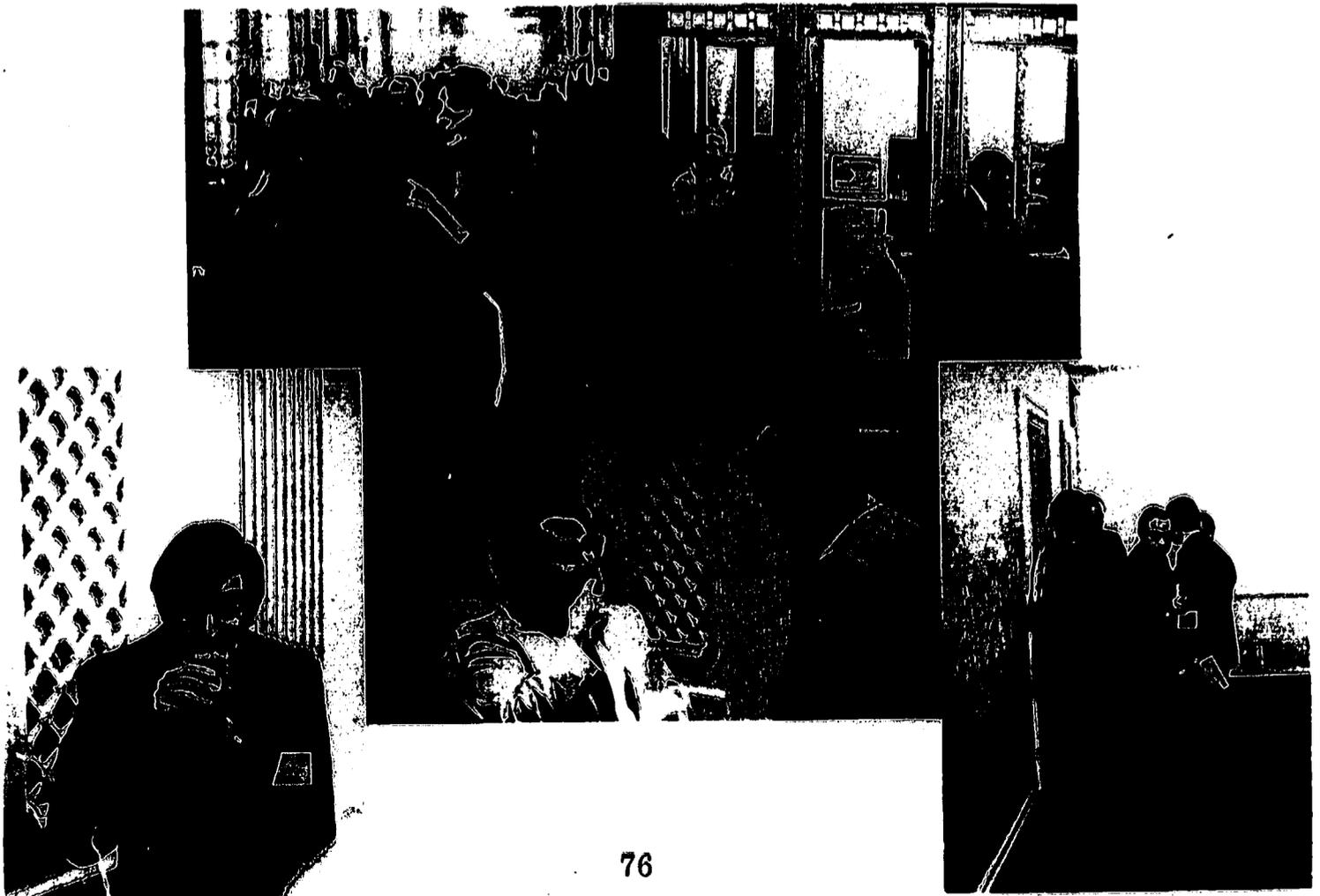
Now I recognize that most of what I read to you is certainly not news to this group. I read it for the express purpose of emphasizing the degree to which the University of California is bent upon an aggressive use of these media in a manner that I have only in a very summary way sketched out for you.

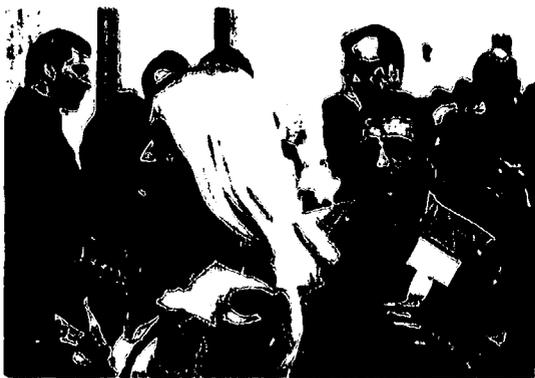
While, we must not permit our glimpse of the future to forego more immediate and familiar uses of educational technology in our established program, now is certainly not too early to be thinking through the viability

of our long range academic plan in reference to the scientific and technological revolutions with which this conference has been concerned. And I appreciate the opportunity of sharing some of these thoughts with you this morning, and I would like now if it is your pleasure to take any questions that you may have about the programs that I have been referring to.



# BETWEEN TIMES





# CONCURRENT SESSIONS



**CABLE/SCHOOL COOPERATION: IT REALLY WORKS!**

**Chairman:** William G. Richmond, San Carlos School District

**Speakers:** Rita Hagemeyer, San Carlos School District  
Andy Trentacosta, Peninsula Cable TV

**Peninsula Cable links the San Carlos School District: A report on Kodaly music teaching in the San Carlos School District**

- I. San Carlos District has 183 outlets in seven schools, but it also covers community homes.
- II. CATV potentials seen by San Carlos
  1. Instruction at school and at home
  2. In-Service providing resource persons and materials
  3. Public information providing reports to school board and community
- III. San Carlos feels qualities needed to warrant production are:
  1. Ease of production
  2. Educational value
- IV. "Threshold" program in music (to get music teacher to each classroom each week). This series follows Kodaly method of teaching music.

Reported by R. P. Slingland

## PROVIDING ACCOUNTABILITY IN INSTRUCTIONAL PROGRAMMING

**Chairman:** Robert Morrill, San Mateo County Schools

**Speaker:** Warren L. Wade, Manager, KTEH, Channel 54,  
San Jose, Calif.

Talked about testing for accountability, using criteria tests with control groups, etc., along with experimental groups. Played a publication from NAEB on the same subject.

Different ways of setting up tests--"Record--Test and Revise." Is seeking grant to publish "Consumer's Guide" to ITV courses.

Reported by Bill Byrd

## WAR OF THE WORLDS: ROCK OR BACH

Chairman: Ken Kramer, KPBS-TV-FM, San Diego, Calif.

Speakers: Jerry Zullo, Operations Manager, KPBS-FM, San Diego; Bob Mundt, Program Director, KOAC-KOAP-FM, Corvallis, Oregon; Elizabeth Young, National Public Radio, Washington, D. C.

The session consisted of a spectrum of radio directions:

- 1) KPBS-FM - A transition from a single concept station to multiple programming for changing audiences during the broadcast day. Formats now include: Classical, Folk, Talk, Rock, News, and Public affairs, and Jazz.
- 2) KOAC-KOAP-FM - Programming for entire state of Oregon by operation of two stations, 80 miles apart. While the AM station, KOAC, provides in-school programming, the sister station, KOAP-FM, broadcasts public programming.
- 3) National Public Radio - Announcement of list of radio resources is available by writing to:  
N.P.R.  
Station Relations  
1625 Eye Street  
Washington, D. C. 20006

Reported by Harry S. Ratner

**BROADCASTING ON THE EUROPEAN CONTINENT:  
PERSONAL OBSERVATION**

**Chairman:** Donald Wylie, San Diego State College

**Speakers:** James R. Spencer, Graduate student, San Diego State College; Larry B. Tuch, Graduate student, University of California, Los Angeles

**Report of student tour of Europe visiting ten European broadcasting facilities.**

**There is a strong movement in Europe to share programming.**

**British Broadcasting:** Brief discussion of BBC and Independent Television.

**Office of Radio Television France (ORTF):** Paris. Stormy history.

**Overloaded with bureaucracy. Government controlled. On CECAM system - 819 line. Andre Francois says film more appropriate for entertainment than information.**

**Osteireichischer Rundfunk (ORF):** Austria.

**Radio Free Europe (RFE):** Munich. Monitor news from communist countries and spread it around.

**Zweites Deutsches Fernsehen (ZDF):** Mainz, Germany.

**Sveriges Radio:** Entering into period of "intense internationalization."

**Norsk Rikskringkasting (NRK):** Norwegian Broadcasting, Oslo, Norway.

**Eurovision:** Brussels, Belgium.

**Reported by Gary Hess**

## WHAT'S NEW IN ITFS

Chairman: Dr. Frank B. George, Long Beach Unified  
Schools  
Speaker: Dr. Allan Fink

1. Presentation by Dr. George on Instructional Television Fixed Service operations and future.
2. Audio tape presentation of ITFS by Dr. Allan Fink
3. Dr. Fink on tape noted:  
Federal funding of ITFS is slow  
Use of ITFS channels by educators over next five years is crucial in  
determining whether educators will retain the 28 channels allocated.  
Sees no competition between ITFS and cable.  
Urges FCC to control ITFS committee.

Reported by Bertram Barer

## RADIO/TELEVISION PROGRAMMING FOR MINORITIES IN ALASKA

**Chairman:** Robert D. Arnold, Alaska Educational Broadcast Commission

**Speakers:** Sue Pittman, Coordinator ASTI Satellite Radio Project; Joe Princiotta, Consultant, Bethel Broadcast.

Alaska is a totally different environment. Rural villages of total native population is the rule. These communities are totally isolated. (175 such villages, only 8 or 9 on road or rail system). Until last year 104 villages had no telephones or radio communications with one another. Last year radio communications were established primarily to improve health and medical services. This has been enlarged for educational purposes with the ATSI Satellite, and two hours of regular two-way broadcast has been established. Problems of half power during school broadcast has hindered the program but full power will be regained shortly. Educational programs presented audio over the radio system included story telling exchange, health education program, family planning, classroom exchange, etc. The classroom exchange was discontinued because of language problems created partially because of technical problems with transmission power. Radio competes with other local activities--movies, bingo, etc. Publicizing programs is difficult. Word of mouth is most effective.

Community television is beginning in Bethel, Alaska. Programs will be locally directed, produced and manned. Consultants only aid technically in doing the job desired. Preserving Eskimo culture through Eskimo television is vital to total concept. The culture is a relaxed one and the programming schedule and quality of a finished product will be relaxed as well. Natives will be broadcasting to put across native ideas in multiple lingual, multiple sound track presentations. Story telling and relating to village story tellers will be a major part of communication efforts. Animation in the studio will try to depict identifiable personages. Animation is a major interest factor for the audience. Puppets and marionettes are extremely effective for all audiences. Natives are being trained to create caricatures of their culture

and to use marionettes to tell stories which educate and inform. Alaska is an area with an extreme problem due to the scarcity of information. Radio and television directed at the rural communities will attempt to satisfy this urgent need.

Reported by Elmer E. Hunt, Jr.

## DOMAINS OF COMMUNICATION IN PROGRAM DEVELOPMENT

**Chairman:** Paul Marshall, KPBS-TV-FM, San Diego

**Speaker:** Erwin E. Gordon, Education Consultant

This session described an approach to learning which develops from a multidimensional framework and tried to break through the current problem of an emphasis on the cognitive domain. It emphasized the need to consider all the domains of human concern and to develop a working vocabulary to make this possible.

Reported by Frank T. McCann

## BROADCAST FACILITIES FUNDING

Chairman: Raymond J. Stanley, Chief Educational  
Broadcast Facilities Program HEW, Washington, D.C.

### Statement of EBFP funding policies:

In reference to Program Bulletin #6

--assignment of priorities will be affected by points  
D, E, and F of the bulletin.

--applications with priorities IA, IIA, and IIIA, may be funded  
on a proportionate basis.

For the 1973 fiscal year funding, existing priority policies will  
remain in effect. Tentative application cut-off date is  
September 15, 1972, with possibility of first 1973 grants  
before January, 1973.

A minimum of \$13,000,000 is available for the 1973 grants.  
Applicants advised to write to Mr. Stanley's office for application  
materials.

Reported by Hugh Smith

**CABLE: A COMMUNITY INFORMATION CENTER**

**Chairman: John Cardenas, Production Manager,  
Cablevision, Channel 6, Santa Rosa, Calif.**

**Speaker: Ethel Greenfield Booth, Researcher, NCTA  
Project**

The name of the game is local production. Cable companies need help, and the educational community is a valuable resource--both in terms of programming and in manpower. Channel 6 has a working relationship with the high schools' Work Experience Program. Some trainees have gone into permanent positions in CATV. Sonoma State and Santa Rosa Junior College have provided valuable program materials, establishing a better relationship with the community through the medium of CATV. School produced programs can be of value if the producing agency meets the required video-level capability.

About TV in general, compatibility is a must and should be realized by the end of the 70's. Two way television will be established in the near future. How is it possible to get together with cable people? Introduce yourself and discuss common needs.

Some programs that have been well received by Channel 6 patrons are:

Psychology (a credit course)

"Now" series--what is current at the time. (received a Golden Mike award for the state.)

County History

Sonoma County in the 70's.

Ecoline--an ecology program

Santa Rosa Speaks--City Council, Civic leaders

Ethel Booth described a project being sponsored by NCTA whereby input from 90 systems is being coordinated to determine cooperative activities, verify data, and determine patterns of operation. An important consideration should be that this is not a case of the school demanding the right to a certain percentage of the capacity, but rather, what can the schools give the cable system.

Reported by Robert E. Morrill

**MINICOURSES, TELEVISION, VIDEO FEEDBACK:  
A NEW APPROACH TO TEACHER TRAINING**

**Chairman: Barbara Dunning, Far West Laboratory**

The Far West Laboratory, funded under the Elementary and Secondary Schools Act of 1965, has been working in the area of improvement of instruction by isolating techniques of interaction between teacher and students. Refinement has developed instructional modules into what has been termed "The Minicourse." The minicourse, as produced by Far West, consists of three to eleven instructional films of 10 to 20 minutes in length, (the films describe and illustrate techniques and styles) a publication called "A Handbook," two assignments to be performed and self evaluation forms. The assignments are the preparation of microteaching units recorded on video with a small group of students. The preliminary lesson is presented, recorded and evaluated. This lesson is then revised and presented to a second small group and evaluated. Assistance in evaluation and revision may be aided by a teammate. Instructional sequence is (1) learning, (2) microteaching, (3) reteaching.

A great deal of research has been done to verify the technique, appropriateness, effectiveness, and affect for lasting change in teaching behavior. Materials are available for several of the minicourses. Twenty-two programs are projected at this time. Television contracts are available by special arrangement through MacMillan Educational Services, Inc., 8701 Wilshire Blvd., Beverly Hills, California, 90211.

Minicourses are generally conducted over a three day period of released time with two hours of academic credit. They may be extended over a longer period and adapted to local programs and schedules.

**Reported by Elmer E. Hunt, Jr.**

**NATIONAL CENTER FOR EXPERIMENTS IN TELEVISION**

**Chairman: Mark Hathaway, KBYU-TV, Provo, Utah**

**Speakers: Paul Kaufman and Staff, National Center  
for Experiments in TV, San Francisco**

A 12 minute tape was shown on images to try and engage interest in experimenting with new techniques, and with synthesizers. It was an attempt to show the relationship of research technology and TV.

As formats move to forms, we must be more creative. Freedom, imagination and initiative--strong base for PTV.

**Reported by Cecil Bondurant**

## CAN RADIO HAVE A SESAME STREET?

Chairman: Frank B. George, Long Beach Unified Schools

Speakers: Educational radio management personnel

Dr. George's introduction of his session began thus: "We have to have objectives to achieve our goals. Today my goals are these: (1) to explore the uses of instructional radio, (2) to reaffirm the potential of radio, (3) to see if there are things we who are doing radio can do to revitalize it, and (4) to intrigue those who are not using it.

"Now, along with goals, we must also have objectives. (In California we all must have!) So, my objectives are that at the end of this session it is my hope that (1) you can identify three characteristics of instructional radio, (2) you will have seen and heard examples of it, and (3) you will have shared ideas for expanding at local levels.

"There is a natural overlapping in radio now of public radio, but truly this is an instructional session! The uniqueness of radio is that it is an inexpensive mass tool. KLON has used it for 22 years. It may be thought by some to be expensive, but compared to TV it is very cheap! It is mass instruction, but it gives the teacher freedom to do individualized instruction, when she works with it as a teaching team. It has also a low cost per pupil. We count the amount of cost, divide by 75,000 people, students! Ask yourself, what can you do with radio? AUDIO. . . .this uniqueness makes it possible to evoke and stimulate mental imagery. In one of our KLON primary series, "Mr. Make Believe", we tell the children and the teachers that we cannot go back and repeat, you have to get it the first time. This, then is radio-audio to teach listening skills, for we believe the development of listening skills is a lost art!"

After these statements of introduction about radio, Dr. George gave a color slide presentation of KLON's "service" of his station's in-school series, and his own district's organization for radio. He mentioned their scheduling of the NAEB series for classroom use. He described certain of his own station-produced series and how they were used. Primary children heard a "Favorite Picture Book" story watching only the picture book in teacher's hand and

hearing the radio voice telling the story! He described student-written and performed programs of poetry, calling it the "Poets' Broadcast." Dr. George also described the securing on tape from around his city of "Authentic Sounds". . . boats, fish market, traffic and then showed in his slides how children translated the sounds they heard from the radio into creative art work!

Dr. George then told the group that in his station the radio program materials have been used a long time! "It is true that the kids are new to the programs", he commented, "but the teachers are getting tired of them!" He stated that he felt KLON's biggest problem was the development of new programs to meet old needs.

He then asked the group these queries: "Can radio have a Sesame Street?" "Are there opportunities to develop in radio what we have in TV?" "Is there a need for instructional radio?" Dr. George then described a Santa Monica man who was using innovative approaches to teach listening skills. He described the use of compressed speech: four times the ratio, so had a one hour program in 15 minutes! This, however, is primarily used for blind people, but could do this, perhaps, on radio. Then, there is the use of cassettes for taping off the air...and the use of listening centers off "listening posts." Dr. George then commented on this by saying, "We are more a transmission system, then, if we do this, however!"

Dr. George then explained how the broadcast from KLON is limited to the elementary grades. He felt that the secondary grades should have only very specific programming planned for them. In their case, NEWS only! He felt that perhaps the NPR News could be helpful to them at these grade levels. He stated that audio listeners to KLON at the secondary level do not exist! Dr. George further explained that for radio listening and utilization the Primary level is best because this age relies and can rely on the mental imagery only!

Mr. Mundt of KOAC remarked on his surprise at the requests to their station for 500 German language guide books, so some adults do listen to some types of radio for learning! Dr. George then reported that some adults do listen to KLON, and this was for foreign languages, and they hoped to develop more

such series the listeners could come to class for some sessions and there would be practice materials on the air, and there would be the conversational classes on radio.

He then asked for examples of teaching classes on the air and these examples were given in random audience comments. KFCA, Phoenix Jr. College, classes were on the air for credit. Charles Buzzard was in charge of these. Someone else said that the only frustrating thing is that a student cannot talk back! The reply was made that you could build in a system with telephone talk back facilities. Other examples of courses given on the air for college credit in California were in the fields of Philosophy, Math, and Foreign Languages. There was then a quick reference to college classes and credit courses by Drake and Ohio. "NAEB, Washington, D. C., has the information on this is more details are wished," someone stated. Gerald Yokum, Associate Director of NER, Washington, D. C., urged the group to try to capitalize on instructional matter for adults. He mentioned the important role being played at present nationally by the study and work being carried on by the NER Instructional Task Force.

The session was closed on the statement by Dr. George that "Programming is the life blood of radio!"

Reported by Pat Swenson

## THE INCREDIBLE TIME MACHINE

Chairman: Walt Robson, Jr., Hewlett Packard,  
Palo Alto, California

A discussion of ways VTR may be used to sell or enlighten. Showed tapes on new products, tutorial tapes, consumer training, service, human relations, and management training. Talked about Hewlett Packard's role in producing tapes.

Reported by Bill Byrd

## RESOURCES FOR AN INTERDISCIPLINARY MEDICAL CURRICULUM

**Chairman:** Theodore C. West, University of California,  
School of Medicine, Davis, California

**Speaker:** Richard F. Walters, University of California,  
School of Medicine, Davis, California

Presentation of the development of a three year interdisciplinary medical curriculum, with concurrent development of an Office of Medical Education at U.C., Davis, to coordinate all learning resources (including traditional lab materials--cadavers, etc.) Particular attention to management of learning resources and need to integrate learning systems. For example, demonstration (on slides) of systems involving TV display, computer storage and quick access systems for use of educational materials.

Reported by Donel W. Price

**"SESAME STREET" AND "THE ELECTRIC COMPANY"  
UTILIZATION TECHNIQUES**

**Chairman: Mike Shapiro, CTW, San Francisco Area  
Speaker: Vivian T. Riley, Utilization Coordinator,  
Children's Television Workshop, New York, NY**

A representative of the Children's Television Workshop, Mrs. Vivian T. Riley, presented an engaging report of the status and prospects for both SESAME STREET and THE ELECTRIC COMPANY. Focusing on utilization of the programs, the report included introduction of the CTW office representative from San Francisco, Mr. Mike Shapiro, and CTW representatives from Oakland, Los Angeles, and East Los Angeles. These representatives assist in organizing community viewing/discussion groups among parents of pre-school children, with SESAME STREET as their interest-generator. Utilization of THE ELECTRIC COMPANY by schools is reported to be both extensive and effective, according to early studies. (The program is carried by 82% of the stations; over 18,000 schools use the program, plus an estimated additional two million children view the program at home.) A detailed study of the impact of the program is expected soon.

Local utilization representatives of CTW are in 16 states at present, and are available on call to aid local educators and lay citizens to develop utilization programs for both SESAME STREET and THE ELECTRIC COMPANY. These representatives or staff members from the CTW home office will assist as possible in other states on request.

A lively discussion followed the presentation with apparent great interest among the school people in the trends in the ELECTRIC COMPANY programming and utilization. A short film was shown for the few who had not seen THE ELECTRIC COMPANY on the air.

One interesting and important activity correlative with the CTW presentations (two were scheduled to accommodate conference participants) was the CTW WALK-IN CENTER in a nearby room where CTW representatives answered questions and provided utilization help and other literature about SESAME STREET and THE ELECTRIC COMPANY, and the CTW.

**Reported by Dick Lewis and  
Bruce L. Christensen**

**NATIONAL EDUCATIONAL RADIO - TRY IT, YOU'LL LIKE IT!**

**Chairman:** Patricia L. Swenson, KBPS-FM, Portland,  
Oregon  
**Speakers:** Bert Harrison, KWSU, Pullman, Washington;  
Gerald Yokom, NER

**Report by Pat Swenson of her experiences as a NER Board member. Only professionally organized, not federally funded.**

**Bert Harrison: Discussion of various justifications for continuing support of NER**

- 1. Legislative problems - support?**
- 2. What is going to happen to 10 watt stations?**
- 3. What is a public radio station?**
- 4. Support of instructional stations.**

**Gerald Yokom; Emphasized the need for member stations to react to and with NER staff. Extremely diversified membership. In last board election only one half of the membership voted. Stations avert coming to NER for assistance when they could.**

**Discussion centered around the problem of raising dues and also proliferation of organizations.**

**Reported by Gary Hess**

## DO IT YOURSELF AUDIENCE RESEARCH

Chairman: Warren L. Wade, KTEH-TV, San Jose

Dr. Wade presented his prepared paper on this subject, taken from a speech he made before a public broadcasting conference. The presentation reviewed three aspects of audience research in public broadcasting:

- (1) Why is it important.
- (2) How a station staff can use it.
- (3) Step-by-step, how a station staff can do its own audience research.

Reported by Rae Lott

MINORITY AFFAIRS: PHILOSOPHY, PROGRAMMING  
RESEARCH, AND PRODUCTION

Chairman: Wes Marshall, KUAT-TV, University of  
Arizona

Speakers: Lionel Monagas, NAEB, Director of Minority  
Affairs, Washington, D. C.; Tony Gomez,  
Research Specialist, KPBS-TV, San Diego;  
Bruce Baird, Indian Telecommunications Project,  
Vermillion, South Dakota; E. B. Eiselein,  
Social Anthropologist, University of Arizona

Lionel Monagas:

Let me give you a perspective of minority programs and minority involvement in training and minority involvement in broadcasting. Our purposes are, number one, to report all the projects that I found are going on on the local level around the country. I make it a point to travel from station to station to try to get some idea of what is going on. I have been to fourteen stations prior to coming here in Washington, Oregon, and northern California, so that I can get a first hand impression and not rely on second hand reports and other kinds of rumor. From a national point of view, while I applaud projects that are going on, they are absolutely below minimum in terms of needs of minority population in the country.

Let me be very clear about whom I am speaking. I didn't set up the definition of minority... I am talking about black people, Chicanos, Indians, Puerto Ricans, Chinese, Japanese. It doesn't go beyond that, it includes male and female in that group. It means nearly 40 million people in this country are classified as the minorities that I am primarily concerned with. I don't know if you realize that there are nearly 40 million people that are non-white, probably more than that, speaking of the census figures. A lot of people were not counted, didn't choose to be counted. In terms of stressing the needs at the local level and also at the national level of different ethnic groups, efforts are absolutely insufficient. In terms of regional programming nothing on any of the regional networks makes any sense at all.

Locally, over 200 television stations and roughly 200 radio stations within the NAEB is still the minimum. I'm willing to concede that if there is one

half hour a week or one hour a week or one hour and 90 minutes every two weeks provided for minorities, that is quite sufficient and balance that against all of the other programs that take place during the course of that same time period. In terms of employment, the same old excuse is used, approximately, that it is very difficult to find "qualified" people. I don't find in the past that it was very difficult for people or organizations to find qualified white people and train them as they needed them trained in their organization and not be able to apply that same concept to the same kind of activity for minority people. We have abilities, we have mental prowess, we have willingness to learn--all kinds of "qualifications." I think these are the things the stations need to examine.

There is a little development taking place now. Otherwise we might lose our licenses. There is something else I would like to see take place and that is, as these stations and national institutes consider this involvement from a legal point of view, that they open up those boards of governors to the people, too, not maintain them as they are now, not representative of the total community. Meetings of the boards of trustees of the universities do not represent the people of that community where that station is-- those members of the boards of trustees come from all over the country; therefore, how can they represent the community? That's just one of the problems. It has to open up on that level and I'm pretty sure it will open up on that level at some point in time.

I don't want to dominate this conversation here today. I just want to give you an impression of the overall views that I see as I travel around, talking to people first-hand. I don't want to take up your time that is more valuable in relationship to what some of you might learn from the actual producers and the actual people who are doing the job out in the field and what they are doing. Thank you very much for your attention.

Tony Gomez:

First of all, my involvement began with the Office of Ethnic Affairs for the Catholic Diocese in San Diego. We started the communications task force there, getting together with groups in Los Angeles and throughout southern

California. We found that in contacting some of the stations we were not working to the Mexican American--Chicano needs. We did not really know how to approach them; what type of program they were looking for. But we did meet or were introduced to the many excuses you get when, as Lionel mentioned, you don't have qualifiable people. Their budgets wouldn't extend for training programs. They couldn't sell program design for the Mexican-American to the advertiser. Everything really revolves around budgets, money, financial matters. They weren't really that concerned with the problems of the minority community until such time as their license was up for renewal at which time they get their community ascertainment.

We got together with a group in Denver, Colorado when we found that Time-Life was going to sell their holdings to McGraw Hill to go into the cable system. We sat down and thought what are we going to do--what are our demands? We talked to McGraw Hill. In the meantime, we had also been negotiating with the stations to see what they were willing to talk about--how we could help them, how they could help us.

These negotiations failed because the stations did not wish to put on any training program, did not wish to give us prime time which was what we really needed. We went ahead and wrote up our challenges; we monitored the stations, we went through all of their public records, and we went through their logs--the whole thing--and wrote up a petition and sent it on to the FCC.

The importance of this has not been realized yet until such time as McGraw Hill can be moved across the country, but I'm not really sure it's a type of begging because at this point it has cost them pretty close to 17 million dollars to negotiate this.

Now, why couldn't they say we'll take a million dollars of that and put it in programming, production work, the things that are really needed. Instead they are willing to lose the 17 million dollars. And still they are going to have to put up with a training program, they are going to have to put up with prime time productions, they are going to have to come up with almost everything we demand.

I really can't add anything more than that, other than that the community now, the black community, the Indian community, the Chicano community,

are certainly becoming aware of what broadcasting is all about. They know what the FCC is all about. They know the airways don't belong to the broadcaster. They are also becoming more sophisticated. What is going to happen to the next licensing period? Now there is talk that the FCC wants to extend the licensing period from 5 to 7 years and make it automatic. I don't know if they have really thought of the consequences. What are these minority groups going to do? They are going to be sophisticated enough about all areas including finances to find the money to buy the stations and take them over if they are not doing their job.

In conclusion, what I'm saying is that minority groups are going to get their way, one way or another. It may take a little bit of time but they are going to do it.

Bruce Baird:

Well, the University of South Dakota and KUSB have been working on this type of program for about five years. Inavailability of money existed until just this last year and is funded through AEW and the Department of Labor, Manpower Development Training Act, and we've got a fairly substantial budget, although there were some problems in the writing of the proposal....

We did get it through the Manpower Development Training Act though, but we got it only through YAR or Rural Impact Area funding--the only places in South Dakota that qualify for reservations, so we could not take any non-reservation Indians--only reservation Indians, which again is something that we are training people to leave the reservations rather than training people to stay on them. We're working around that now... .

My prime student is a man 37 years old. The only contact he ever had with non-Indians was four years in the Air Force. His last job was four and a half years ago as a hotel clerk. When he first came to us he wouldn't even grunt in English. He would only speak Dakota. Now he is running a four hour shift from 10:30 p.m. to 2:30 a.m. on a hard rock radio station. We've got four of them running that shift. It took us four and a half months to get time consciousness to set in to where he would show up on time. We ask them to

leave their homes for fifteen months. We're asking them to do it on \$41 a week and they still keep coming back every week.

We started out with ten. I still have them. I picked up 12 additional ones in February and lost two--two that came off the most remote parts of the reservation. When those two got to us they preferred to speak their native language rather than English. Everything that happened to them was one big cultural clash and it was a mutual consent between them and us that the program wasn't for them. It was too much, too quick.

There are no suits, no ties, no sirs, no misters. Everything is on a first name basis. I have five instructors. Open door policy in my office, open door policy in my home, my phone number they all have. They call me at at two o'clock in the morning to talk over problems. We're going through three divorces because of the remote situation of bringing them in and out. We've got a drinking problem with three or four. We've been able to put a cap on. The main thing is they keep coming back, coming back, and coming back. By the end of fifteen months we have a good opportunity of placing all of them that have been trained within the State of South Dakota, within the reservations, with the tourism bureaus and the public schools.

We are now running a half hour program called "Circle." We are in our ninth week with an all Indian production crew building set designs, lighting, posting, producing, audio, camera, directing, floor and set ups. The entire process is all Indian from top to bottom. Because of the facilities that are at KUSD, we are limited in the technical quality of the program: the black and white studio is not much bigger than this room; we can have only a couple of cameras in operation at any one time; exposed heat pipes tend to crack in the middle of a production; the walls need soundproofing. The radio station is the same way. But we will continue to train qualified people who will be able to walk up to your door and say, "Hire me. I am qualified." We don't want any of them dropped for not knowing the job. Any other reason is fine. We don't ever want a station to say to one of our trainees, "We are firing you or losing you because you don't know how to handle the job." When they go up to the door they will know how to handle any job that they want to apply for.

E. B. Eiselein:

Let me begin simply by saying that in minority audiences, what we are talking about, Chicano, blacks or American Indians or orientals, or homosexuals or women or whatever we want to call them, it is damn complex. Most broadcasters that I have come in contact with, and I have come in contact with quite a few, tend to stereotype their general audiences. I find that broadcasters are very eager for audiences to be general and when it comes to minority audiences they are even more eager. Consequently, they fly even more by the seat of their pants in the minority programs or in ignoring minority programs.

Research is one of the keys that we've got to use. I think we've got to admit that we don't know the first thing about minority programming because we've never had minority programming in this country. It begins by understanding that your audience is complicated. For example, the Chicanos: 4% of the people of Mexican American descent in Tucson, Arizona consider themselves to be Chicano; 57% consider themselves to be Mexicano; 43% consider themselves to be Mexican-American. There's a problem right there. What do we call them? They have different tastes and different socio-economic classes. We have university professors at one end; we have garbage collectors at the other end. We have people who enjoy a great deal of different kinds of television programming and our research basis is simply: we begin a project of research with the idea of finding out who the audience is, what the problems of the community are, from the people--not just a few leaders, but from the people. Find out what the solutions are. And more importantly, how can we effectively deliver a program of information to the people who need that information, and deliver it to them in a format which they will want and understand. It is complicated and that is pretty much where we are at with this kind of integrated research thing. Our research approach is very involved with the community and it is very involved with broadcasting. I don't want academic researchers. I want researchers working on a project all of whom are Mexicanos, Chicanos, who become involved with media and go on to enter the media as directors, research specialists, and wind up, I hope, as producer-directors. We are faced with a couple of problems--the problems

of creating research people who don't know the first thing about broadcasting and are not going to ask the right questions. We are faced with the problem of broadcasters who don't know anything about research and are interested in changing their set ideas based on Anglo models towards prompt cultural research. And that's kind of where we're at, at this time. We have done research as well dealing with such diverse groups as the Navajo, the Oriental, in the Tucson area; we haven't done anything so far in that area with the Blacks. And that's kind of where we're at.

## CABLE: SCHOOL RELATIONS

Chairman: Gene Hambelton

Speakers: Dick Rector; Doug Montgomery

Objective stated: The relationship of Cable-casting operations to schools. The FCC has mandated a channel with two-way communication feedback capability.

What can we do with Cable? It requires the joint effort of school and Cable sources. Some possibilities are: political coverage, board meetings, university courses for credit.

Cable needs a full-time engineer for program quality. Dick Rector indicated the openness of access to educational programming, but the failure of educators to maintain the rigor of programming. Students are better, in his opinion, for putting on programming than institutions. Good preparation for broadcasting.

The relationship between Cable and education--realization of what Cable can offer and understanding of educational financial limitations. The Cable operator has an obligation to support his community which requires a commitment to drop lines into schools, both for public relations and service.

How much is CATV required to provide? This is not yet clear and must be worked out.

1. CATV must provide channel space.
2. It should be capable of providing further channels if leased and paid for.
3. Technical advice and assistance to educators.

Drop should be provided a university in return for programming. There must be a contract that is mutually beneficial.

Reported by Tobe Snow

## RADIO STAR THAT I ARE

Chairman: Bertram Barer, San Fernando State College

Speakers: T. Gregory, Pasadena City College; Frank B. George, Long Beach Unified

Barer: Goals for the undergraduate for academic or professional career:

1. Develop competence in specific areas.
2. Provide scholarly framework for education in the field.

We are moving in "the generalist direction," away from specific job training. We are moving away from the descriptive-historical approach, and toward "general knowledge."

(He went on to describe his curriculum in detail.)

Gregory: Big changes are occurring in telecommunications, and education is way behind. We must have "hands on" courses, and inculcate "responsibility" into our students. But more than that, we must be more concerned with change.

George: Teaching itself is communication. But awareness of visual literacy should be taught to all. Perhaps we can reach down further, and teach the basic vocabulary in high school, then to the community college for "hands on" teaching, and then to the university for this all-important "visual literacy."

Reported by Donald McCall

## PAINLESS ACCOUNTABILITY: A CASE HISTORY

Chairman: David Moore, Archdiocese of Los Angeles

Speaker: J. Scott Guerin, Systems Analyst

Accountability is a reality in education, particularly in California. But if a teacher or administrator is to be held accountable, he must have the tools with which to evaluate his performance and that of students. This archdiocese/teleservice concept is a performance system for evaluating the effectiveness of ITV programs with regard to the number of students viewing, the degree to which they meet objectives, student and teacher reaction, appropriate target population, desirable scheduling, student growth, etc. The system was developed over a number of years of trial and experimentation and can now be replicated by any school district with aid from teleservice at a cost of approximately \$3000.

The steps of the system development were:

1. Need assessment beginning with desirable result and then determining steps required to get there.
2. Identify the problem--where we are versus where we should be.
3. Figure ground rules--what we have to work with and constraints.
4. Select solution strategy design forms after exploring alternative solutions and selecting the most appropriate and effective.  
The teleservice questionnaire uses 34 parameters in an easily filled out form which is appropriate for computer analysis. A compilation of results is received from the computer.
5. Evaluation--employing the information to help new teachers, determine which series to keep and which to drop, aids in scheduling and grade level selection, the use and abuse of TV in a school system, etc.
6. Implementation--based on the data, developing a system which makes maximum effective use of relevant programs.

Weaknesses of the evaluation system:

--the assumption that the teachers and/or administrators know what should be--a problem with all accountability systems.

--the complete reliance in this system on teacher reaction to programs--no assessment of student need or reaction is made directly, only through teachers.

Reported by Tara Bleier

**MAKE PUBLIC RELATIONS WORK FOR YOU**

**Chairman: Walter J. Schaar, KSPS-TV, Spokane, Wash.**

**Speaker: Robert Mott**

**Mr. Mott reported on P.B.S. activities in station promotion. Discussion followed regarding various kinds of promotion vehicles, i.e. radio, newspapers, guides, etc. National Friends of Public TV was reported and some ways were discussed that they intend to help with station promotion.**

**Presentation Content:**

**PBS feeds programs direct to 190 stations. 219 use programs.**

**PBS provides:**

- input for program guides**
- news releases, newspaper feature articles**
- spot copy**
- promo spots**
- color for publicity (eg. magazine covers)**
- photos, promo slides**
- ad mats for local stations**

**PBS is considering future possibility of matching local and federal funds for public information uses.**

**Reported by Hugh L. Smith and  
Walter J. Schaar**

## LOW COST PRODUCTION - Part I

Chairman: Thomas Meador, San Diego State College, San Diego, California

Speakers: William Maheras, San Diego State College; Gary Statler, San Diego State College

Two films were shown by Mr. Statler which included a number of optical effects produced by him and others: Permutations and a promotional film for a hockey team.

Mr. Maheras showed a film, Liquid Light, which he produced using low cost, largely in-camera optical effects.

Some of the procedures were explained by the speakers in response to questions.

Reported by Frank T. McCann and  
Gene Manning

## LOW COST PRODUCTION - Part II

### Electronic Effects

Speakers: Jaime Shandera, TV director and Production Manager; Wesley Smith, Art Instructor

All effects were produced at Station KOGO. Jaime demonstrated many special effects utilizing studio props and still frames off a film chain. He showed many different electronic effects using a special effects generator.

Wesley demonstrated electronic effects utilizing video feedback and a system of mirrors.

Reported by Michael D. McLean

**NPR - JESUS CHRIST SUPERSTAR**

**Chairman: Parke Blanton, National Public Radio**

**Speakers: Lee Frischknecht, NPR; Elizabeth Young, NPR,  
Al Hulsen, Corporation for Public Broadcasting**

The session opened with a tape playback of NPR promo, recorded examples of NPR program material, and recorded reactions from NPR listeners.

Liz Young talked about program plans, music bridges, etc. She indicated that the planned five-minute daily news feature was scheduled to start about May.

Lee Frischknecht explained technical structure at the interconnect system. He pointed out difficulties of setting up direct feeds from most parts of the country, and mentioned possibilities of satellite transmissions, etc.

Al Hulsen discussing CPB criteria and their implications said 90% of the population will be served by a full-service public radio station by 1976. He said that the value of the criteria approach is being demonstrated in improvements being made in operational level of many stations.

**Reported by Gordon Tuell**

## CCTV IN THE SECONDARY SCHOOLS

**Chairman:** Donald G. Kirkorian, Fremont Union High School District, Sunnyvale, California

**Speakers:** Ted Clarke, Shadle Park High School, Spokane, Washington; Michael Biele, Lynbrook High School, Sunnyvale, California

**Utilization of CCTV in senior high school curriculum as shown by:**

Spokane, Washington school (Ted Clarke) --Two senior highs completely equipped to produce and distribute.

Additionally, students working successfully in these programs can qualify for internships (paid) at KSPS, CH 7, open circuit broadcast.

**Voc-Ed Act and Career Education--The implications of CCTV preparing for entry levels in various work opportunities as shown by:**

Sunnyvale, California (Mike Biele) now in seven schools in the Fremont District.

Reported by R. P. Slingland

## MEDICAL TEACHING CENTER: DESIGN CONSIDERATIONS

Chairman: Thomas Banks, U. C. Medical Center

Speaker: Joel L. Amromin, U. S. C. School of Medicine

This session outlined planning for an creation of multi-media capability for Mayer Medical Teaching Center at USC.

- Principles of planning:
- 1) Maximum versatility
  - 2) Minimum complexity
  - 3) Minimum manpower requirement
  - 4) Maximum interface capability

Design steps:

Equipment must serve functions specified.  
Clear control layout.  
Ease of control by user, e.g. same set of buttons or lectern (on, off, play, stop) can apply to film, slide, VTR, etc.

- Major pitfalls:
- 1) Contracting too early
  - 2) Combining vendor and consultant
  - 3) Not having centralized coordinated design
  - 4) Purchasing equipment without guarantee of adequate staff.

Reported by Paul Haley

## INTRODUCTORY TV PRODUCTION: A NEW APPROACH

Chairman: Dan F. Baker, California State College,  
Long Beach, California

Speaker: Bill Weisgerber, California State College,  
Long Beach, California

Co-hosts Dan Baker and Bill Weisgerber from Long Beach State College in no way deceived their audience with the title to the session, A New Approach to Teaching TV Production. Their multi-media presentation included video tape, audio cassette and student designed texts.

During the first two weeks the students utilize check-out audio playback-only cassette machines. The tapes walk the student through each phase of hardware operation. The audio production board tape begins with, "turn on power button in lower left corner, now turn up the control marked "master gain" to 3 . . . etc., etc." And so forth until the student, working at his own pace and repeating as often as necessary, has mastered the hardware operational sequence to his own satisfaction. During these self-instruction sessions (twice weekly) the instructor is available for individual assistance if needed.

The students prepare for a "do it" exam of operating the equipment for the instructor. Tests have shown that, like Schramm's research, there is no significant difference between the programmed instruction via audio cassette and standard class instruction. The exam covers all areas the PI cassettes deal with: audio, lighting, film chain, cameras, etc.

At the end of the first two weeks the class gathers to view a tape. One half watches with video only available, the other half watches with audio only available and then joins at the conclusion of the playback to "discuss" their interpretations of the program. The point quickly reached is the significance of the interdependency between audio and video in the total production entity.

Next the class views a tape with the directors intercom line plugged into the foreground audio track. This, the instructors believe, give the students a realistic idea of the director's role in relationship to the other activities. Next a slide presentation is added with the same tape playback showing the

audio console and this added facet is discussed, then a third playback is made with an 8mm film added to the tape and slide presentation (again, director's voice over on the tape) showing the TV switching and visual controls.

The test used is one that the student writes with the instructor; a loose leaf notebook divided into three parts: 1) The student as the receiver, doing programmed exercises, reading assignments, following examples, etc.; 2) The student as sender, outside special interest projects, field work, observations, papers on special interests and studies; 3) The student as sender/receiver in a composing situation working with other students. Also in the text is a "your bag" area featuring a literal bag for written materials, pamphlets, etc., the the student collects and wishes to display to the instructor.

Students produce all the "how to" cassettes and video presentations to assist the next class incoming in production.

Reported by Stan Little

## HOWDY DOODY'S ELECTRONIC LEGACY

Chairman: Joelle Dobrow, Graduate Assistant, U.C.L.A.

Introduction by Joelle as she represents the first of a generation "raised" on television. Those "weaned" on TV have a "third eye" which lets them see themselves as being on a video screen.

This was followed by a discussion of the book, Guerilla Television. It has sections on the repair and maintenance of Sony 1/2".

1/2" videotape projects:

1. Immediate playback to people, then recording their reactions.
2. Venice Community Action Council. People of Venice and City Council both made tapes which they exchanged. Lessened hostility between groups.
3. Videotaping psychological counseling and encounter groups.
4. Fifth grade Chicano classroom with a white teacher. Problem was vandalism.
5. Showed tape of McGovern caucus.
6. Discussion centered around the need for message and content rather than technical polish.

Reported by Gary Hess

## CPB STATION SUPPORT

Chairman: Cal Watson, Corporation for Public Broadcasting

Questions asked by Watson: How is distribution of general support working for stations? Is it an equal distribution?

Community Service Grant is set up to do what you think is best for your community.

It can be used for salaries, materials, and programming.

If a station has a particular desire to do a certain program type in their area and need the help for funding, all they have to do to be considered is to make application.

Reported by Cecil Bondurant

**TAPE, TAPE, WHO GETS THE TAPE?  
ON AGAIN, OFF AGAIN, FLANNIGAN**

**(Two sessions combined)**

**Chairman: Burt Harrison, KWSU-FM, Pullman, Wash.  
Donald Smith, KUER-FM, Salt Lake City, Utah**

**After a discussion by the principals concerned, both of these sessions were combined in a general discussion of radio production, engineering, public affairs, CPB and HEW grants, and NPR services and presented as a continuation of the NPR session "Jesus Christ Superstar."**

**The discussion included:**

**Importance of maintenance of broadcast quality.**

**Various methods of raising funds.**

**Advantage of using a community advisory committee**

**Use of interconnected service.**

**Use of telephones for "call in" and "call out" programs, etc.**

**Reported by Bertha Montenegro**

## HIGH SCHOOL PRODUCTIONS: PROBLEMS AND SOLUTIONS

**Chairman:** Donald Kirkorian, Fremont High School District  
Sunnyvale, California

**Speakers:** Mike Cannon, Student, Fremont High School;  
Dave Roessell, Student, Fremont High School.

This session was introduced by the chairman who introduced students from advanced TV production classes at Fremont High School in Sunnyvale, California. The students presented a series of slides demonstrating their physical set-up, a 13 channel closed circuit type with a TV receiver in each of 125 classrooms, gym, auditorium, and gym facilities. The cable transmission originates at the instructional TV center, located in a classroom wing. Two Dage monochrome cameras with a third camera available. There are also limited film chain capabilities and a TV graphics camera. All video inputs are channeled into a new Dynair V5-152A switcher-fader. A new addition also is a Sony Portapak system.

The demonstration concluded with a video tape presentation of the Tuesday Report, a news-announcement program prepared for the entire school, viewing once a week, covering straight bulletins, live or taped interviews, sports news, and clever feature called "Weasel Most" which airs a selling and trading facility for individual students through dramatizations by a talented student actor.

The courses are called TV Production, with textbook-oriented beginning courses and "hands-on" opportunities in advanced courses. Much of the work is done in the students' free or spare time. One technician is hired for the staff.

Reported by Marjorie J. McGilvery

## SECAM/60

Chairman: Robert Moffett, Golden West College

Speaker: Joe Roizen, Telegen, Palo Alto, Calif.

Mr. Joe Roizen presented a description of the SECAM/60 system of color encoding. As a background, a history of the development of the N.T.S.C. system in the United States and the P.A.L. and SECAM 50 systems of Europe were given. A technical description of N.T.S.C. and SECAM/60 systems and a series of slides were presented, showing SECAM/60 color as played from inexpensive recorders, eliminating many of the problems found in the N.T.S.C. system. A series of slides demonstrated the ability of SECAM/60 to reproduce the same color on different receivers without adjusting hue or saturation, thereby eliminating the need for these controls on SECAM/60 receivers. The application of the system to educational TV' was discussed.

The SECAM/60 color TV system is particularly applicable to educational, medical, industrial and entertainment closed-circuit installations where accuracy of color rendition is essential.

SECAM/60 color television is a variant of the original French system which is adapted for use with American standard 525 line, 60 field scanning. Unlike the American Standard N.T.S.C. color system which is highly subject to transmission path errors; requires expensive color recorders and needs frequent skilled user adjustments, the SECAM/60 system is relatively immune to transmission errors and requires no more receiver controls than those of a monochrome set.

Because of the nature of SECAM/60's encoding process, it lends itself to recording and reproduction by the simplest and most economical video tape recorders available. SECAM/60 tapes can be used interchangeably between video tape recorders of the same format and achieve excellent color fidelity. The SECAM process applied to the 60 field, 525 line scanning standard combines the best features of high rate image presentation for minimum

flicker and accurate color rendition on a relatively knob free display device. The special SECAM television receiver or monitor requires only brightness and contrast controls for high quality color reception. After initial adjustment to a standard color test pattern, the SECAM receiver/monitor is capable of accurate reproduction of color images over long periods of time without critical resetting. Receivers can be made switchable for both SECAM and N.T.S.C. reception.

The equipment necessary to originate high-fidelity SECAM color pictures is basically the same as that needed for N.T.S.C. Differences, mostly advantageous from economic and simplicity of operation standpoints, relate to encoders (fewer required), decoders (several types available), videotape recorders (simple "monochrome" machines useable) and switchers (more complex RGB type required).

In comparing SECAM/60 to N.T.S.C. care must be taken to look at a total system and its cost of operation, rather than comparing just the parts of a total system.

Reported by Robert Whalley and  
Glen Pensinger

ARTICULATION FOR TWO-YEAR AND FOUR YEAR  
COURSES IN TELECOMM

Chairman: Dan F. Baker, California State College,  
Long Beach, California

Speaker: Lynn Grosse

Dan Baker and Lynn Grosse submitted their annual report "Articulating Undergraduate Telecommunications Curricula in California." Representatives from curricula omitted were asked to submit the necessary information as soon as possible. In addition, it was decided that every (California) college should mail 50 copies of their Telecom curriculum (one page outlines for each course) to Dan Baker for distribution to Telecom departments in California. Subsequent to a discussion on a screening process by California State Colleges to keep the number of students (transfer) down, or, at least under control, Stuart Hyde was asked to look into the legality of such a screening process. Henry Leff and William Wente were asked to coordinate more frequent meetings of Northern California CCTAC members.

There was a general concern and call for more time and opportunity to discuss and work on course articulation. Greater activity on the regional level was requested.

Reported by Julian J. Bender

**CABLE: MEDICAL INFORMATION DISSEMINATION**

**Chairman: John Cardenas, Cablevision, Channel 6,  
Santa Rosa, California**

- 1) In cable production origination outlets there exists a need to present medical programs on a level low enough so that the average viewer will understand.**
- 2) Local production, tapping the resources of your community is the key to public interest programming via cable.**

**Reported by Robin Sandefur**

## ASSURING COST EFFECTIVENESS

Chairman: Walt Robson, Jr., Hewlett Packard,  
Palo Alto, California

Speaker: Robert Walcher, Naval Amphibious  
School, San Diego, California

### I. Procedure for Validated Instructional Package Design for achieving cost effectiveness

A. Course curriculum defined

B. Lesson Plan

C. Criterion Test

D. Media (one medium is selected)

1. Validation procedures are formative; used on variety of students.

2. Accountability depends on careful consideration of

a) audience

b) problem (what is the problem of intended audience)

c) objectives

d) validation

### II. Package should include hardware and software.

Reported by Gilda Benstead

## NEED MONEY? IT'S THERE FOR THE ASKING

Chairman: Roland E. Fenz, Corporation for Public  
Broadcasting, Washington, D. C.

Potential sources: Federal government, city or state government, individuals or corporate foundation funds--the latter hard to get. Diversity of funding is more effective. No one organization has enough to cover expenses. Private individuals are the easiest source. We are now "riding" the crest of availability of funds--it's a now activity with immediate results, not long term, like university action. A broadcast activity is a "worthwhile" community activity like a museum or a symphony but can't always get the funding because of these prior commitments.

You have to know what you want to do, what the needs are, and you have to put it down on paper. Then you have to write down the hard figures of the costs, relate the proposal to a "bigger picture." A too rigid demand may stop the project. Negotiation is usually profitable. Have a preliminary talk with an outline or a sketch approach. Be a listener! They may be interested in a part of your project. Your institution has to make a contribution in time and in money, to get research for proof. The success of a salesman is measured in terms of the number of calls he makes.

Bringing in lay people will give you "visibility outside your own institution." The money is there. Get acquainted with the areas your potential donors have donated in before. The chances are greater that they will repeat in the same interest area.

"Black Book"--an NAEB publication listing funding agencies; contact Presley Holmes, of National NAEB headquarters. Wills and requests have occasionally helped to fund TV stations, but they need working on for four and five years--not immediate results.

The real "guts of what you are" is the software, the teacher, the cassette, etc.

Diversity of funding gives you a better foundation for doing what you want.

Mr. Fenz is available to help solve public broadcasting financial problems. Telephone or write.

Reported by Marjorie J. McGlivery

## S.C.A.: I AM CURIOUS RADIO

Chairman: Wendell Dodds, University of Nevada,  
Reno, Nevada

Wendell Dodds, University of Nevada, opened the session by briefly describing the development and present status of SCA. The letters, SCA, stand for Subsidiary Communications Authorization, a sideband communications service which was approved for educational FM stations by the FCC on January 31, 1961. SCA provides for one way transmissions that accompany the primary FM signal and was made possible by the advent of multiplexing. Although SCA shares the FM channel, it cannot be received by conventional FM receivers. Therefore, SCA might be considered as a closed-circuit audio system that affords a variety of professional and educational services not suitable for standard or FM broadcasts.

To date, the utilization of SCA has been rather limited. The bulk of Subsidiary Communications Authorizations granted by the FCC are in the eastern states, with the majority being operated by commercial broadcasters. However, one commercial station in Los Angeles has expanded its broadcast service to include foreign language programming of SCA. Through the assessment of a subscription fee or the leasing of SCA receivers, some commercial stations have found SCA to be profitable, especially as a means of selling background music to offices, waiting rooms and commercial concerns.

Perhaps the most successful educational FM station to implement SCA services is WHA, University of Wisconsin, at Madison. A special multi-media demonstration from the Wisconsin State FM network, highlighting their utilization and successes with SCA, was presented. In addition, it outlined the development of Wisconsin's Educational Telephone Network (ETN), which links courthouses, university extension centers, and hospitals. SCA and ETN have been used as complementary services since each offers advantages for different situations. Some of the services in use or currently envisioned by media planners include nurses' training and other forms of continuing medical education, agricultural extension services, general adult education, profes-

sional workshops, and conferences, among others. Also, SCA can offer a networking service by sending programs to other FM stations for simultaneous or delayed broadcast over their main frequency.

SCA has been explored as a possible means of financing the operation of some educational FM stations, but the initial results are not yet available. The required investment in hardware includes an SCA transmitter (priced as low as \$5,000.), SCA receivers (\$35. and up), and any necessary production equipment needed to make the programming service possible. A major manufacturer of SCA equipment is Johnson Electronics, Casselberry, Florida. FM broadcasters who are interested in investigating the potential of SCA for themselves were referred to (1) Part III, paragraphs 73.593-73.595 of the FCC's Rules and Regulations, and (2) Lorne Parker's book, SCA - A New Medium, available through the National Association of Educational Broadcasters.

Reported by Robert K. Avery

**SATELLITE BROADCASTING VIA MINI-TV  
TRANSMITTERS FOR RURAL AREAS**

**Chairman: Charles M. Northrip, University of Alaska**

**Speaker: Robert D. Arnold, Alaska Educational  
Broadcast Commission, Executive Director**

The use of 1-10 watt VHF television transmitters on an experimental basis for providing educational television coverage to small villages and towns was covered. Initially fed by 1/2" video tape recorders, these stations will eventually receive live signals from communications satellites.

State operated schools and personnel will be used. A small CPB grant has been received to accomplish installation, monitoring and evaluation. No public TV will be used until it is tested in the schools. The transmitters to be used are translators with the receiving capability removed. This experiment requires an experimental license from FCC.

Cable has been considered but found not feasible because of extreme weather conditions. They see this as a means to reach children in remote villages who are two years or more behind children in the cities educationally. Everything they do must be planned around native leaders and control must be given to local boards.

Two universities will run the experiment. Decisions as to final control will be made at the end of the experimental period.

Alaska regards decisions made at Geneva Conference in regard to communications as very significant to them. Their effort now will provide a boost to this concept.

Programming is also in the experimental, planning stage. Programming must be multi-lingual to reach citizens of Alaska.

Reported by Rae Lott

## WHERE'S THE ACTION? CAREER OPPORTUNITIES

Chairman: Sharon Greenwell, NAEB, Washington, D. C.

The speaker inquired about the "make-up" of the audience and went on to state that fewer "producer-director types" would be needed, and "multi-media types" would be in demand.

Areas of need: Broadcast journalism (with film and TV skills)

Engineers

Academic appointments

Instructional design

She advised students to get as much varied experience in course work in all areas as possible. Develop any related interest areas in film, radio, education, etc.

Growing areas of need: Industry and private consultant firms

Police Science

Medical and health science

Film expertise, also writing and editing

Telecommunications centers of the future will need:

1. Program design people
2. Legal guidance for management
3. Coordinators of various media

The speaker stressed to students present: "Know a lot about everything."

She also outlined NAEB placement services' role.

Reported by Donald Kirkorian

## THE MANY FACES OF WESTERN CANADA ETV

**Chairman:** Dr. Richard Bell, University of Calgary, Alberta

**Speakers:** John Philpott, Director of TV, L.T.U., Faculty of Education, The University of Calgary; Mr. Dieter Nachtigal, Producer-Director, MEETA (Metropolitan Edmonton Educational Television Association, ETV Station), Edmonton, Alberta; Mr. Irving Schieman, L.T.U., University of Calgary.

Dr. Richard Bell, Director of the Instructional Technology Unit, Faculty of Education, University of Calgary, introduced first Mr. Dieter Nachtigal of MEETA (the ETV station and organization in Edmonton) who described the present activities of this, the first educational television station in Canada. MEETA serves four agencies: the Provincial Department of Education; the Public and Catholic School Systems of Edmonton; the University; and the station, which produces about 30% of its educational programming, also serves the CBC French Network (3 to 7 P.M. and after 9 P.M.) Daily programs start with Sesame Street, followed by in-school programs (9-3 weekdays), and adult education programs (7-9 P.M.) Station programs reach the immediate area by VHF broadcasting, and also serve the Calgary area on cable, and some programs reach northern isolated areas by tape and cable repeat programming.

Mr. Nachtigal showed a variety of sample programs, and suggested that the future of educational telecasting, at least in Alberta, may include extensive cable transmission. The MEETA organization--with a staff of 46 and an annual budget of about \$600,000--also serves area industry and business, as well as government and social welfare agencies with cooperative programming.

Dr. Bell discussed the extensive support of Instructional Television in some of the Provinces of Canada and the Instructional Program Tape Duplication Center of the Provincial Department of Education of Alberta at Edmonton. Over 1000 programs are available on request and are duplicated on 1/2" video tape for school use. The programs are from the production activities of the MEETA organization in Edmonton, the Calgary Region Educational

Television Association (CARET) which operates a 2500 MgH station in Calgary, the universities of Alberta, as well as many programs from the United States sources--N.I.T.V. Center, Great Plains, and N.E.T. The National Film Board of Canada and several other film producers have all made films available. Program tapes are intended to diversify and increase the materials resources in the public and private schools of all levels, and to motivate improved instruction techniques. A full catalog of all resources is provided. In addition, and indicative of excellent cooperation among education agencies, the Universities of Alberta are sharing teacher materials for on-campus and in-service use; a cooperative catalog facilitates the exchange of programs, and the Provincial Department of Education supports the effort.

John Philpott described a course for teachers--not unlike a basic instructional resources course in the United States--that was recently produced for distribution by the University of Calgary, Faculty of Education; the 13-week, 26-program course started in the fall of 1971 has been characterized by extensive provisions for up-dating and revising to meet changing needs and audience suggestions. Credit for the course may be obtained by students in the Southern Alberta region. Mr. Philpott presented a video tape explaining the CARET program services in the Calgary area, similar to the MEETA services in Edmonton.

Dr. Bell closed the meeting with an invitation to WEST members to attend the ETRAC and EMAC (Educational Television and Radio Association of Canada and the Educational Media Association of Canada) joint meeting in Toronto the last week in June, 1972.

Reported by Dick Lewis

**T.L.C.: TELEVISION'S LEARNING CONTRIBUTION**

**Chairman: Thomas Banks, University of California  
Medical Center**

**Speakers: Mrs. Betty Moffitt, R.N., Samuel Merritt  
Hospital; Thomas W. Washburn, Consultant  
for Teleproduction, Merritt Hospital.**

- I. Participants in the Helene Fuld Health Trust Network  
(Project is called Merritt Hospital Studio 3)**
  - A. Audience is the entire hospital community--  
Considerable emphasis on nursing education, both pre-entry,  
in-service, and continuing education.**
  - B. Distribution includes 12 program sources available throughout  
the hospital--color capability.**
  - C. Used in community relations, student recruitment.**
  - D. Patient education: can be at bedside via television .  
A principle problem is physician approval for patient education.**
  
- II. Equipment came from Helene Fuld Health Trust.**
  - A. Program is now in stage 3 -- 2 VTR's -- \$200,000 in Fuld  
gifts thus far.**
  - B. 39 other hospital schools in the program, nationwide.**
    - 1. Sony 1" and now 1/2" compatibility among schools.**
    - 2. Schools receive and exchange tapes.**
  - C. Production people are much needed to expand program.**

**Reported by Donald S. Bryant**

**EDUCATIONAL BROADCASTING INSTITUTE PREVIEW:  
INSTRUCTIONAL DESIGN**

**Chairman:** Charles Vento, V.I.T.A., Sacramento, Calif.

**Speaker:** Kenneth L. Warren, Head of Educational Services  
Division of Continuing Education, Oregon State  
System of Higher Education

The introductory unit generally excited interest in securing the material. I believe several in the audience would like to use the material in training others rather than attend the workshop. Taking the course before offering it, "makes sense."

Reported by Nancy J. McGraw

## RADIO WEST - REBIRTH AHEAD

Chairman: Tom McManus, KPBS-FM, San Diego, Calif.

After a discussion during which it was agreed that better communication between radio stations in the WEST area is needed, Parke Blanton volunteered his N.P.R. office as a central point for receiving and disseminating information about personnel, programs, plans, and other items. All stations, whether a member of NPR and WEST or not, were to be encouraged to express cooperation through the NPR San Francisco office.

Reported by Wendell H. Dodds



EXHIBITS



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# WINE TASTING PARTY



BEST  
OF  
WEST

## BEST OF WEST AWARDS

### RADIO

#### Special Instruction - Foreign Language

KTAI-FM, "Grandfather and His Tales"  
A & I University, Kingsville, Texas

#### News and Sports

KPFK-FM, "Police Informers & Agents Provacateur"  
North Hollywood, California

#### Public Affairs

KPCS-FM, "Gone the Rainbow"  
Pasadena City College, Pasadena, California

#### Arts & Humanities

WMUB-FM, "This is Bix"  
Miami University, Oxford, Ohio

#### Music, Recorded

KPCS-FM, "Jazz Heritage"  
Pasadena City College, Pasadena, California

#### Music, Live

KANU-FM, "Aaron Copland"  
University of Kansas, Lawrence, Kansas

#### Special

KUAT-AM, "AA of the Air"  
University of Arizona, Tucson, Arizona

#### Experimental

KBYU-FM, "Contemporary Sound Sculptures"  
Brigham Young University, Provo, Utah

#### Instructional

KBPS-AM, "Portland Opera: Meet the Performers"  
Portland Public Schools, Portland, Oregon

BEST OF WEST AWARDS (Continued)

TELEVISION

Public Television

- Public Affairs: "My Name is Human"  
Camarillo Hospital, TV Project,  
Camarillo, California
- Merit Award: "Feedback", KOAP-TV, OEPBS  
Oregon Board of Education TV Station
- Science: No award
- Arts & Humanities: "When the Bough Breaks"  
KOAP-TV, OEPBS, Portland, Oregon
- Children's Programming: "Newseekers"  
KCET-TV, Los Angeles, California

Instructional Television

- Elementary Level: "Polynesian Families", Hawaii State  
Department of Education, Honolulu, Hawaii
- Secondary Level: "CONTEMPORARY POETRY, A Happening"  
Valley Instructional Television Association,  
KVIE-TV, Sacramento, California
- Merit Award: "Introduction to the Short Story",  
Fremont High School, Sunnyvale, California
- Community College Level: No award
- College Level: "Fundamentals of Chemistry", KUAT-TV,  
University of Arizona, Tucson, Arizona
- Merit Award: "Mass Entertainment: A Case for Survival",  
Instructional TV Services at Brigham Young  
University, Provo, Utah
- Adult Education/Industrial Military:  
"Drawing Blood Samples", Instructional  
TV Service, Brigham Young University,  
Provo, Utah
- Merit Award: "Golden Keys Lab", Golden West College,  
Telecommunication KOCE-TV, CH 50,  
Huntington, Beach, California

BEST OF WEST AWARDS (Continued)

Student Division

High School:	"Tuesday Report" Fremont High School, Sunnyvale, Calif.
Community College:	No Award
College/University:	"Come to the Country with Musica Nova", Chico State College, Department of Mass Communication, Chico, Calif.



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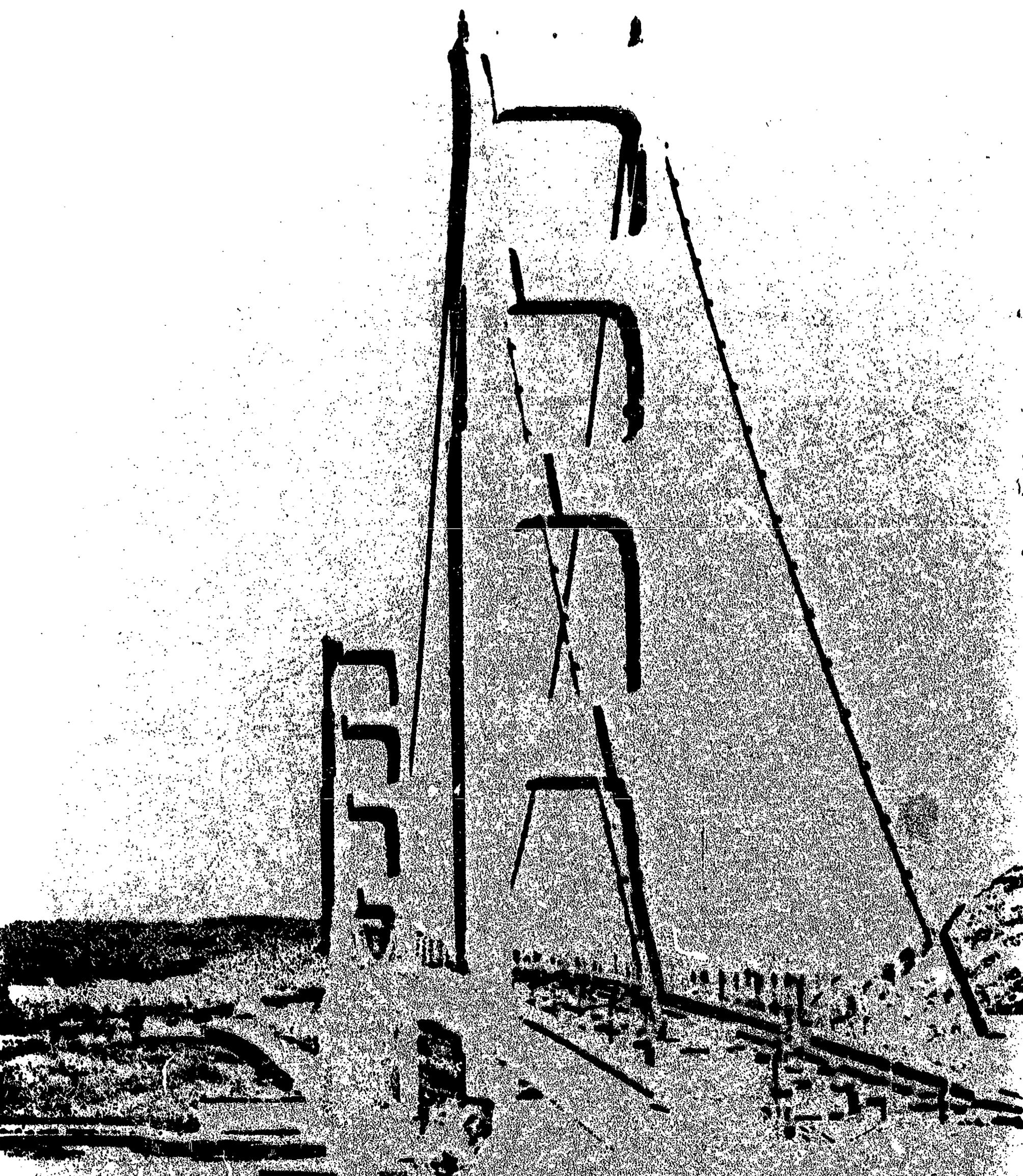
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